

Service Manual

Portable CD Player

COMPACT
disc
DIGITAL AUDIO



SL-SX475EG

SL-SX475EB

SL-SX475E2

SL-SX480EG

SL-SX482EE

Colour

(S).....Silver Type

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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Panasonic®

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1 Safety Precaution

1.1. Precaution of Laser Diode

CAUTION:

This unit utilizes a class 1 laser. Invisible laser radiation is emitted from the pickup lens when the unit is turned on:

1. Do not look directly into the pickup lens.
2. Do not use optical instruments to look at the pickup lens.
3. Do not adjust the preset variable resistor on the optical pickup.
4. Do not disassemble the optical pickup unit.
5. If the optical pickup is replaced, use the manufactures specified replacement pickup only.
6. Use of control or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

CAUTION:

This product utilizes a liser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.

Wave length: 780nm

Maximum output wadiation power from pickup: 100 μ W/VDE

Laserradiationfromthepickup lens is safety level, but be sure the followings:

1. Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.

CAUTION:

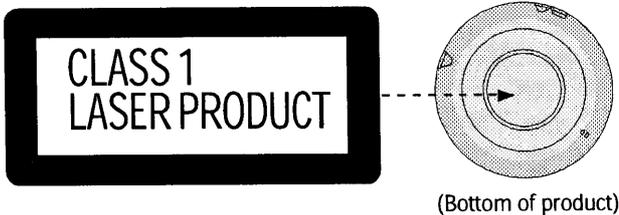
Dieses Produkt enthält eine Laserdiode. Im eingeschalteten Zustand Wird unsichtbare Leserstrahlung von der Lasereinheit abgestrahlt.

Wellenlage: 780nm

Maximale Strahlungsleistung der Lasereinheit: 100 μ W/VDE

Die StrahlungasderLasereinheitist ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zeriegen, de die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Denwerkseitig Justierten Einstellregler der Lasereinhit nicht verstellen.
3. Nicht mit optischen Instrumenten in die Fokussierlines blicken.
4. Nicht über langere Zeit in die Fokussierlines blicken.



ADVARSEL USYNLIG LASERSTRÅLING VED ARBEID. NØR SIKKERHEDSÅRBEJ- YDRE ER LØDE AF FUNKTION. UNNSA UMSÆTTELSE FOR STRÅLING. LÅSERSAFETYVILLER. VORSICHT-UNSYNLIG LASERSTRÅ- LUNG. WEIN ARBEITUNG GEÖFFN- ET UND SICHERHEITVERRIEGELUNG ÜBERBRÜCKT, NICHT DEM STRAHL AUSSETZEN. DANGER-INVISIBLE LASER RADIAT ION WHEN OPEN AND INTERLOCK DEFEATED. AVOID DIRECT EXPOSURE TO BEAM. ROL50244	VARO! AVATTAESSA JA SUOJALU- KITUS OHITETTÄESSA OLEET ALTTIINA NÄRMYÄTÖNTÄ LASERSAFETYVILLER. ALLKÄÄSÖ OLSÄESSÄ. VARNING OSYNLIG LASERSTRÅL- NING NÄR ÖPPNÄ FÖR ÅR ÖPPNÄD OCH SPÄRREN ÅR UTKOPPLAD. RETRAKTA EJ STRÅLEN. ADVARSEL USYNLIG LASERSTRÅL- NING NÄR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNSA EKSPONERING FOR STRÅLEN. A danger puissance, l'écume ordinaire du cadreur peut endommager l'oreille de l'utilisateur.
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(Inside of product)

1.2. Handling Precautions for Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.

So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

1.2.1. Handling the traverse deck (optical pickup)

1. The traverse deck (optical pickup) is an extremely high-precision construction and must not be subjected to impact, excessive vibration, or other types of rough handling.
2. To protect the laser diode against electrostatic breakdown, be sure that the short land A and B of the flexible board (FFC board) should be short-circuit by solder before pulling out the FFC. Then inserting a short pin or similar object into the tip of the flexible board.
(Refer to **Fig.1**)
3. Handle the flexible circuit boards with care; excessive force could cause them to be broken.
4. Do not turn the pre-set variable resistor (for adjustment of the laser power); it has been adjusted at the factory.
(as shown in **Fig.1**)

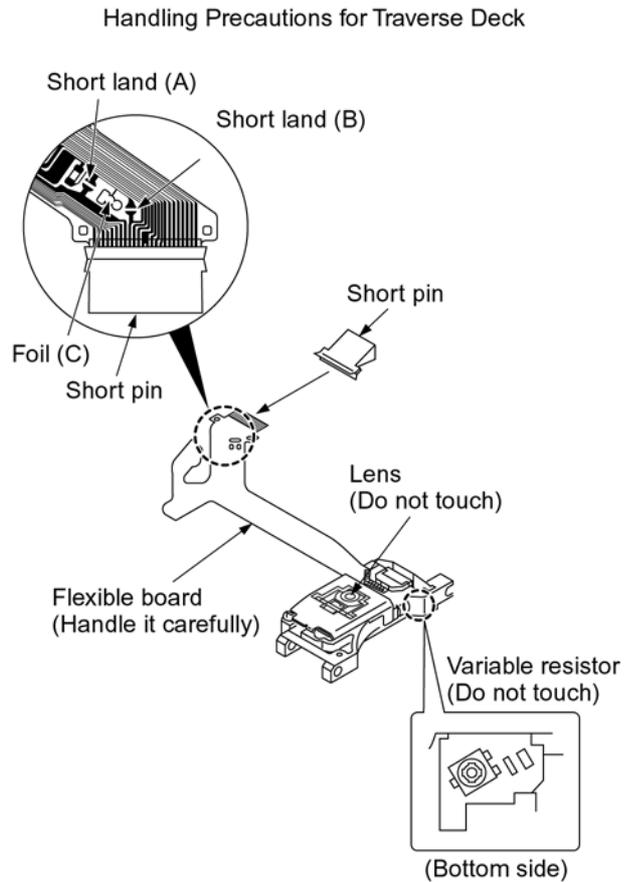


Fig.1

1.2.2. Caution when replacing traverse deck

The new traverse deck short-circuits by the short pin, the foil (C) and short lands to protect the laser diode against electrostatic breakdown. Be sure to replace to new one following procedures.

1. Remove the short pin from the FFC, and then connect it

to the connector.

2. Cut the foil (C). (Refer to **Fig.1**) (Take care not to make contact with cutting point each other.)
3. Unsolder the short lands. (Refer to **Fig.1**)

1.2.3. Grounding for electrostatic breakdown prevention

1. Human body grounding
Use the anti-static wrist strap to discharge the static electricity from your body. (as shown in **Fig.2**)
2. Work table grounding
Put a conductive material (sheet) or steel sheet on the area where the optical pickup is placed, and ground the sheet. (as shown in **Fig.3**)

Caution

The static electricity of your clothes will not be grounded through the wrist strap.

So, take care not to let your clothes touch the traverse deck (optical pickup).

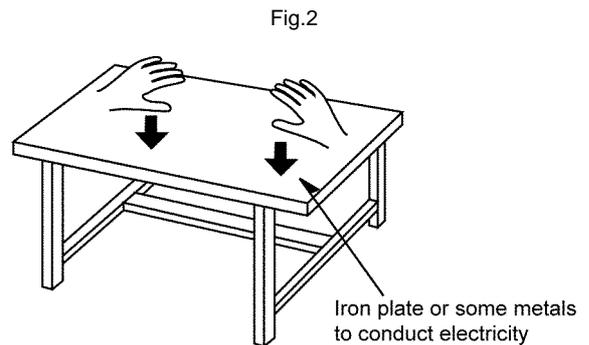
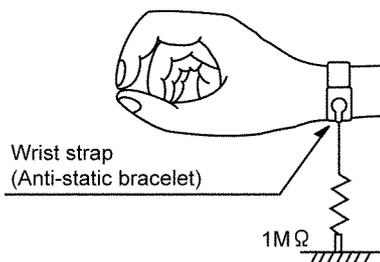


Fig.3

2 Service Navigation

2.1. About Lead Free Solder (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.

Caution:

- Pb free solder has a higher melting point than standard solder, Typically the melting point is 30-40°C higher. Please use a high temperature soldering iron. In case of soldering iron with temperature control, please set it to 370±10°C.
- Pb free solder will tend to splash when heated too high (about 600°C).

When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

3 Specifications

3.1. Accessories

- SL-SX475
 - Stereo Earphones (L0BAB0000182).....1pc.
- SL-SX480
 - Stereo Earphones (L0BAB0000182).....1pc.
 - AC Adaptor (RFEA431E-2S).....1pc.
- SL-SX482
 - Stereo Earphones (L0BAB0000183).....1pc.
 - AC Adaptor (RFEA431E-2S).....1pc.
 - Wired Remote Control (N2QCBD000010).....1pc.

3.2. Specifications

Recharging time: About 3 to 4 hours

IAudio (CD-DA)

Sampling frequency: 44.1kHz

No. of channels: 2 (left and right, stereo)

Frequency response: 20Hz to 20,000Hz
(+0dB to -3.6dB)

Headphone output level: RMS max. 8mW+8mW/16Ω
(adjustable)

IPickup

Light source: Semiconductor laser

Wavelength: 795 nm

IMP3

Supported bit rates 32kbps to 320 kbps

(Supports variable bit rates): (128kbps is recommended)

Supported sampling frequency: 48kHz/44.1kHz/32kHz

Maximum number of items:

(total no. of albums and tracks); 999

(total no. of albums); 500

Maximum album levels: 100

IGeneral

SL-SX475

Power supply:

DC input DC4.5V

(AC adaptor, not included);

SL-SX480/SX482

Power supply:

DC input DC4.5V

(AC adaptor, included);

AC adaptor input: AC 220 to 230V 50/60Hz

Power consumption:

Using AC adaptor (MP3/CD-DA); 1.4W/1.2W

Recharging; 3.6W

Dimensions (W×H×D): 138.6mm×24.4mm×138.6mm

Mass:

with batteries; 209g

without batteries; 162g

Operational temperature range: 0°C to 40°C

Rechargeable temperature range: 5°C to 40°C

IPlay time

Using on a flat stable surface at 25°C, EQ is off, Hold is on, Anti-skip is on POS1 (CD-DA), recommended bit rate (MP3: 128kbps), and the Digital Re-master is off (MP3). Play times are in hours and approximate.

*The play time may be less depending on the operating conditions.

*Play time will be considerably reduced when playing CD-RW.

Batteries used	MP3	CD-DA
2 alkaline batteries (LR6)	75	33
2 optional rechargeable batteries* (P-3GAVE/2B)	33	15

Note:

Specifications are subject to change without notice.

Mass and dimensions are approximate.

AC adaptor standby power consumption: 0.3W

4 Service Mode

4.1. Display of Self-Diagnostic Function

This model is equipped with a self-diagnosis function and shows, when necessary, the following indication in the LCD section of the set.

LCD display



(Press PLAY and STOP button. After 15 seconds, it is displayed for 2 seconds.)

"F15"---This indication appears when the Down switch fails to turn ON since the magnetic head fails to move up/down normally (Due to trouble of the magnetic head or trouble of the magnetic head up/down motor) or the magnetic head P.C.B. is out of position or a foreign matter has mixed in or for some other reason.

In such a case, check the peripheral parts of the magnetic head, repair or replace defective parts with normal ones.

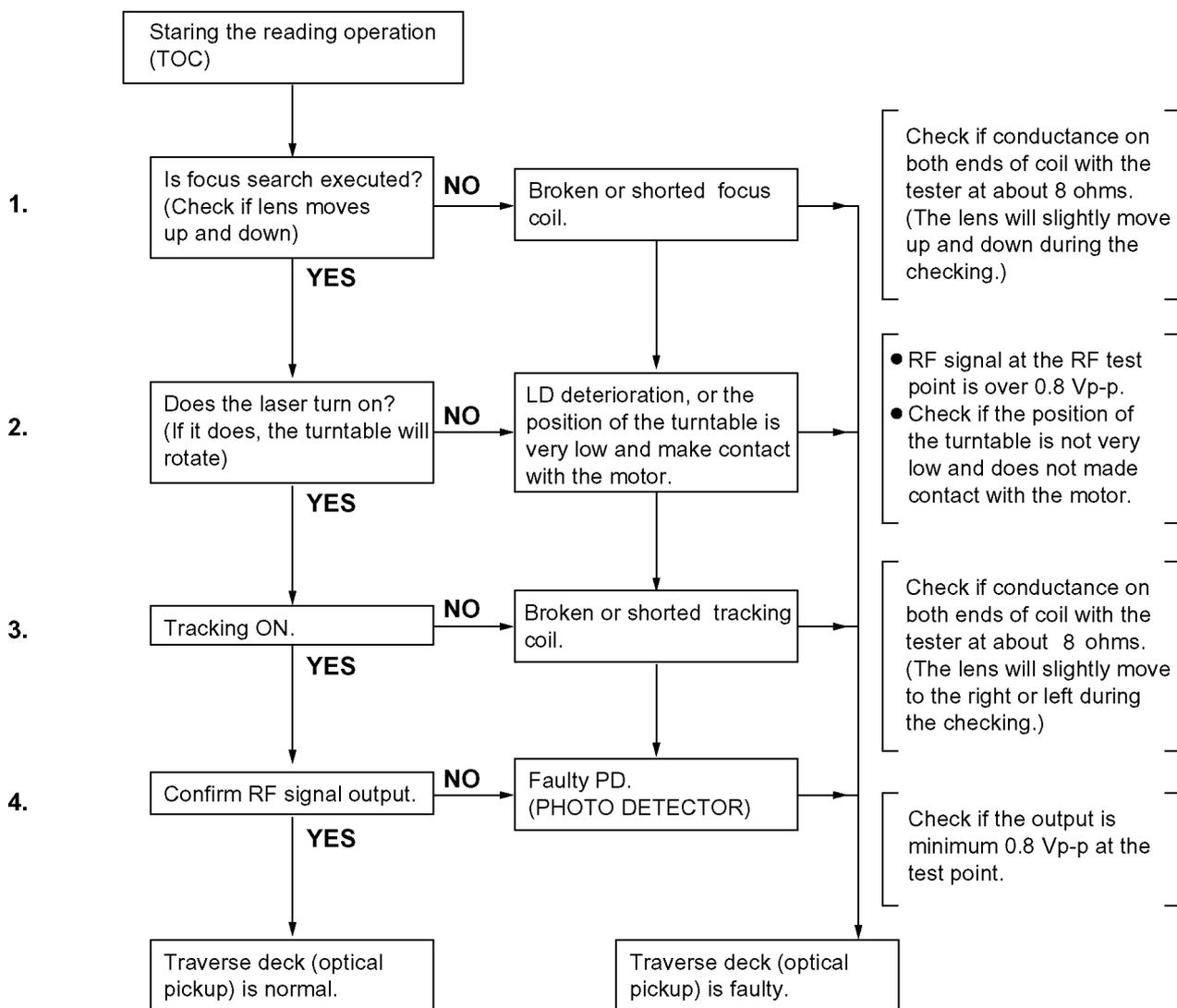
5 Troubleshooting Guide

5.1. Checking the Operation Problems on the Traverse Deck (Optical Pickup)

Make sure to follow the procedures below to check the operation problems of the traverse deck (optical pickup) before replacing it.

Replace the traverse deck only after the problem is identified.

(Procedure No.) (Checking Points) (Cause) (Testing Procedure)



※ Replace the traverse deck.

- Check electrical circuit.
- Check for flaws on disc or if it is warped or not centered.

Check the operations described below on the traverse deck after replacing it.

*Checking Skip Search

1. Play an ordinary musical program disc.
2. Press the skip button to check for normal skip search operation (in both the forward and reverse directions).

*Checking Manual Search

1. Play an ordinary musical program disc.
2. Press the manual search button to check for smooth manual search operations at either low or high speed (in both the forward and reverse directions).

*Checking Playability

1. Play the 0.7 mm black dot and the 0.7 mm wedge on the playability test disc (SZZP1054C) and verify that no sound skip or noise occurs.
2. Play the middle tracks of the uneven test disc (SZZP1056C) and verify that no sound skip or noise occurs.

6 Disassembly and Assembly Instructions

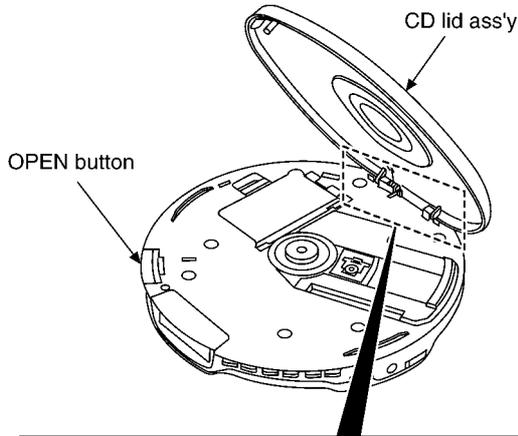
6.1. Operation Checks and Component Replacement Procedures

- This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
- For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.

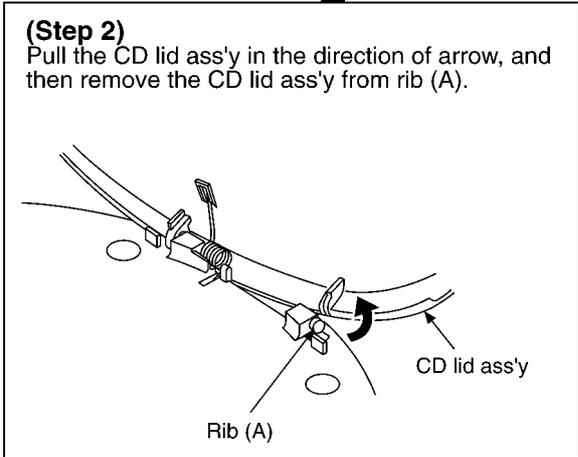
6.1.1. Checking for the P.C.B.

6.1.1.1. Checking for the P.C.B. (A side)

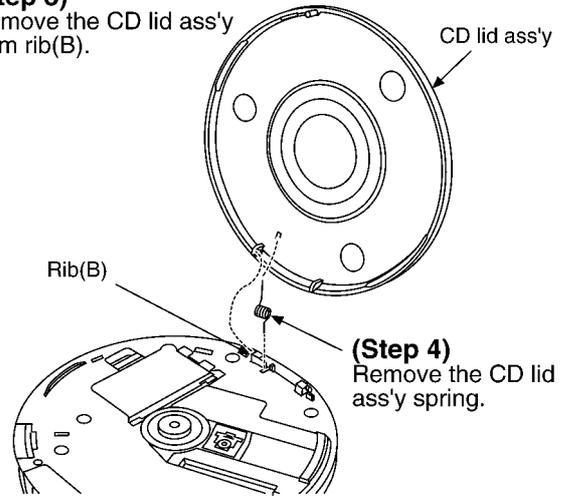
(Step 1)
Pressing the OPEN button, open the CD lid ass'y.



(Step 2)
Pull the CD lid ass'y in the direction of arrow, and then remove the CD lid ass'y from rib (A).

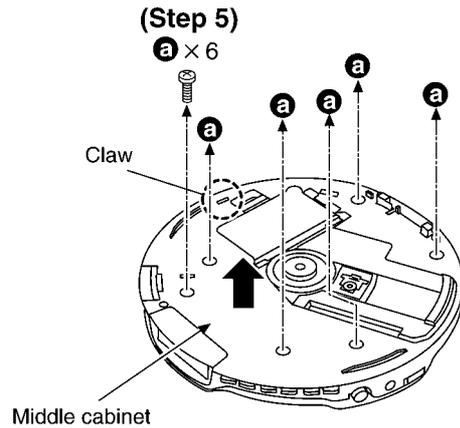


(Step 3)
Remove the CD lid ass'y from rib(B).



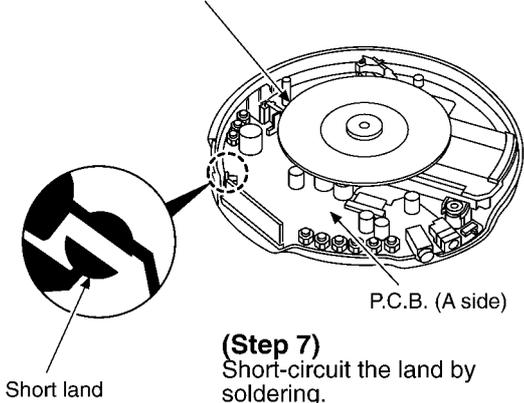
(Step 4)
Remove the CD lid ass'y spring.

(Step 6)
Release the claw, and then remove the middle cabinet.



- Check the P.C.B. (A side) as shown below.

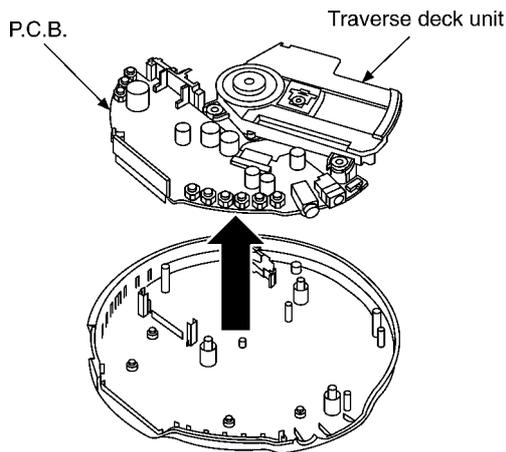
(Step 8)
Put the disc (8cm).



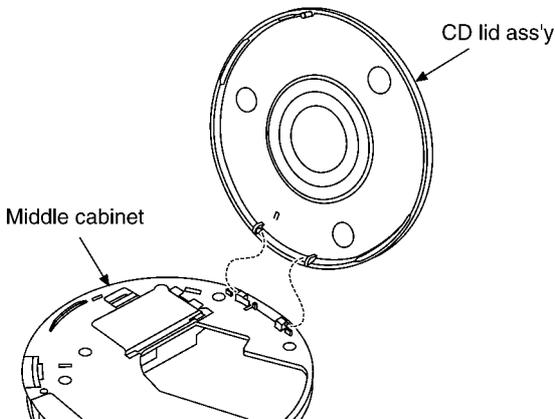
(Step 7)
Short-circuit the land by soldering.

NOTE:
After checking, unsolder the short land to open circuit.

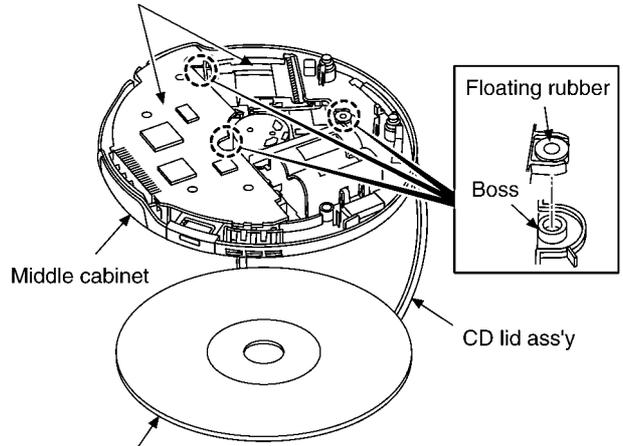
(Step 1)
Remove the traverse deck unit and P.C.B..



(Step 2)
Install the CD lid ass'y to middle cabinet.

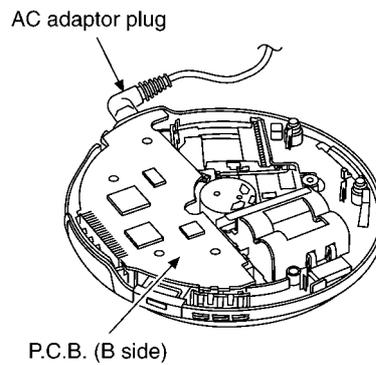


(Step 3)
Align the floating rubbers with bosses, and then locate the traverse deck unit and P.C.B. on the middle cabinet.



(Step 4)
Put the test disc, and then close the CD lid ass'y.

• Check the P.C.B. (B side) as shown below.

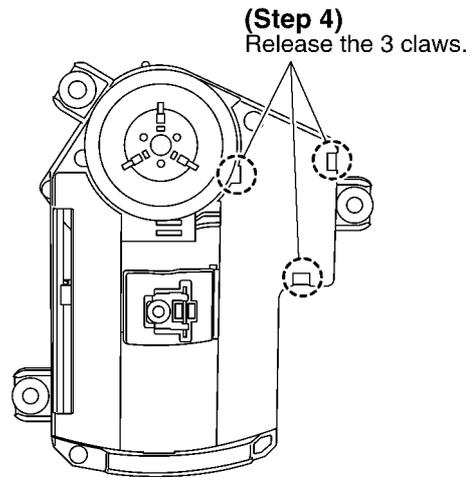
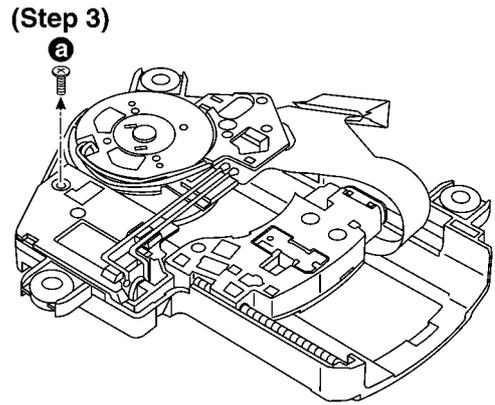
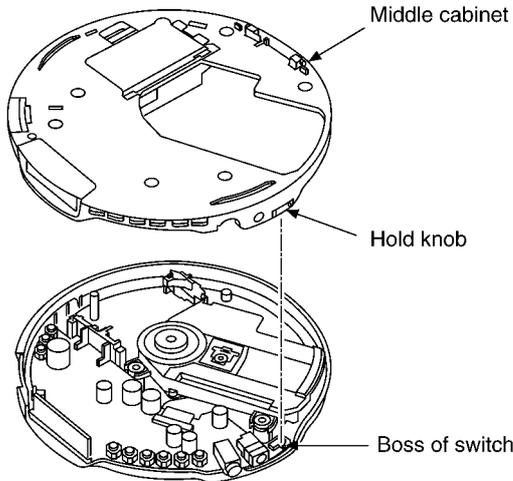


(Step 5)
Insert the AC adaptor plug into the DC IN jack, and then apply the power.

NOTE:
After checking, unsolder the short land to open circuit.

Notice for installation of middle cabinet

- Make sure the boss of switch is fit in the hold knob.



6.1.1.2. Replacement for the traverse motor

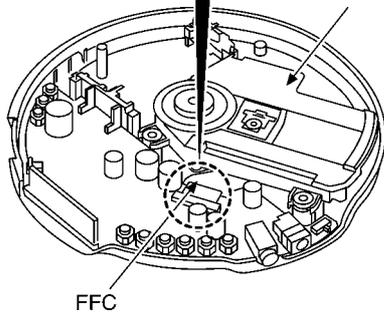
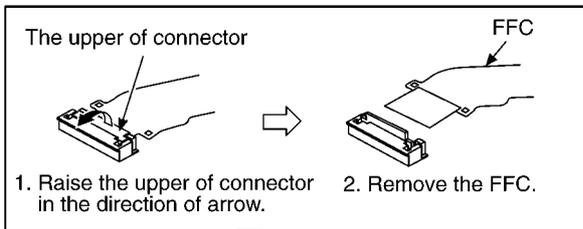
- Follow the (Step 1) - (Step 6) of item 6.1.1.1.

Note:

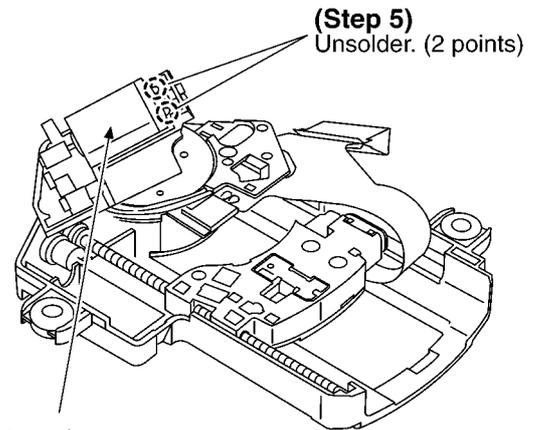
Be sure to confirm the item 4 Handling "Precautions for Traverse Deck" before removing the traverse deck ass'Y.

(Step 1)

Pull out the FFC from connector.



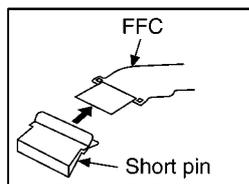
(Step 2)
Remove the traverse deck unit.



(Step 6)
Remove the traverse motor.

NOTE:

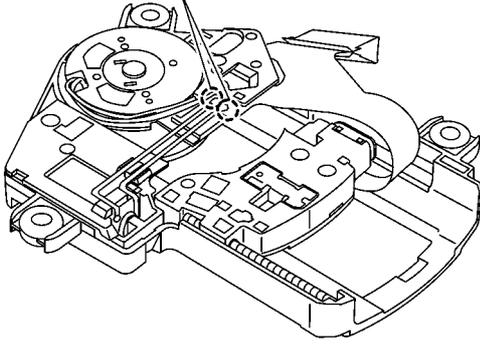
Insert a short pin into the traverse deck's FFC. (Refer to "Handling Precautions for Traverse Deck".)



6.1.1.3. Replacement for the optical pick-up

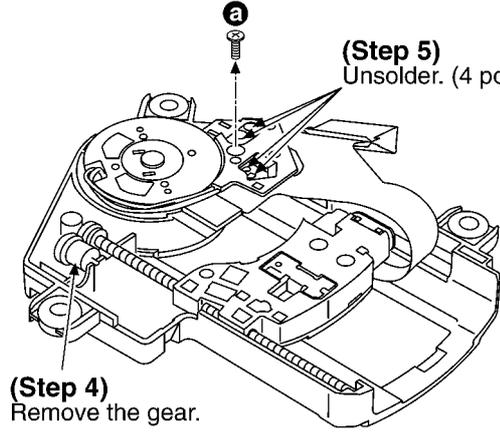
- Follow the (Step 1) - (Step 6) of item 6.1.1.1.
- Follow the (Step 1) - (Step 3) of item 6.1.1.2.

(Step 1)
Unsolder. (2 points)



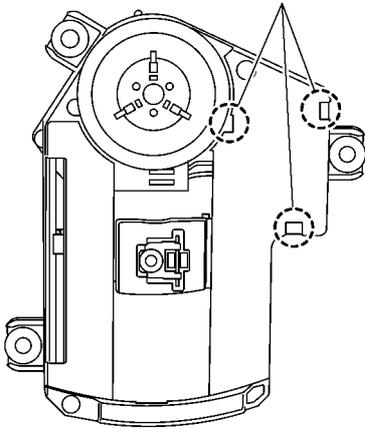
(Step 6)

(Step 5)
Unsolder. (4 points)

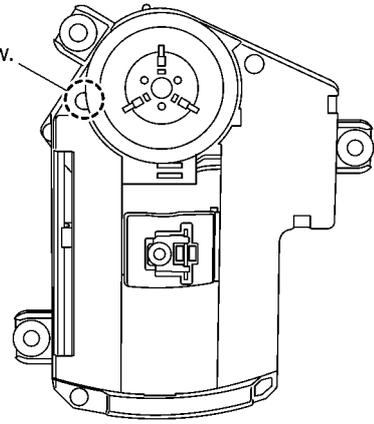


(Step 4)
Remove the gear.

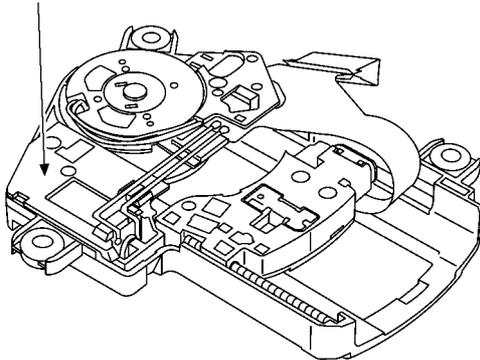
(Step 2)
Release the 3 claws.



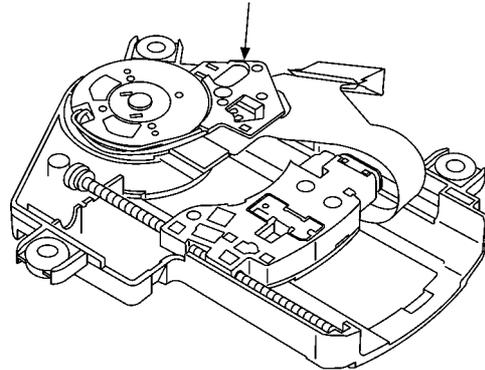
(Step 7)
Release the claw.



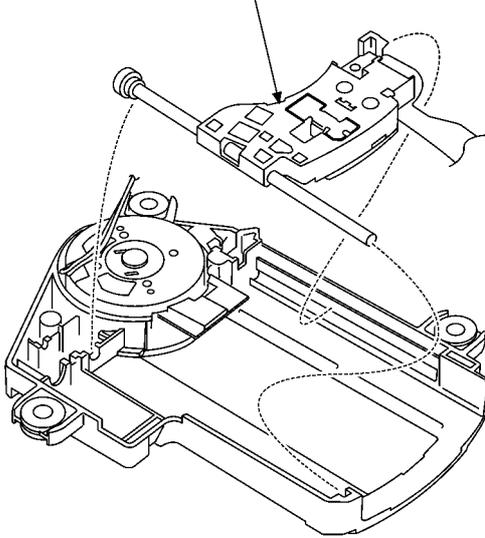
(Step 3)
Remove the holder and traverse motor.



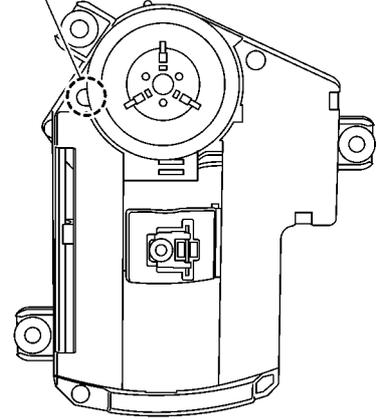
(Step 8)
Remove the FFC holder.



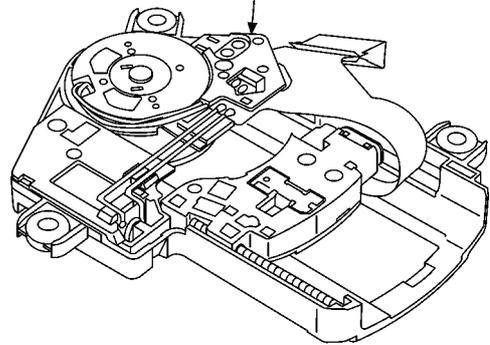
(Step 9)
Remove the optical pick-up ass'y.



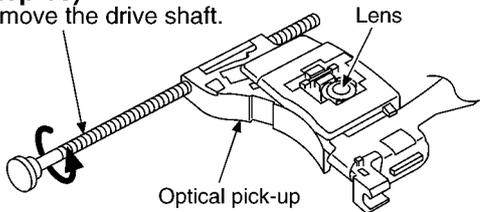
(Step 3)
Release the claw.



(Step 4)
Remove the FFC holder.



(Step 10)
Remove the drive shaft.



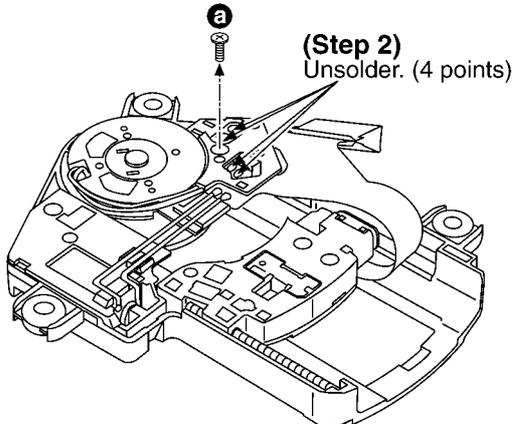
NOTE:

1. Use care to prevent damage the optical pick-up, due to the precision construction.
2. Do not apply the grease on the lens of optical pick-up.
3. Do not touch the lens of the optical pick-up.

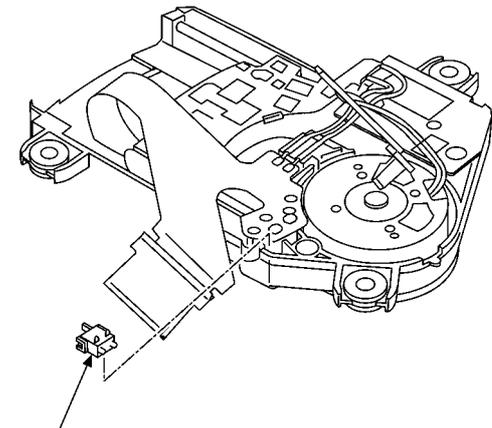
6.1.1.4. Replacement for the rest switch

- Follow the (Step 1) - (Step 6) of item 6.1.1.1.
- Follow the (Step 1) - (Step 2) of item 6.1.1.2.

(Step 1)



(Step 2)
Unsolder. (4 points)



(Step 5)
Remove the rest switch.

7 Measurements and Adjustments

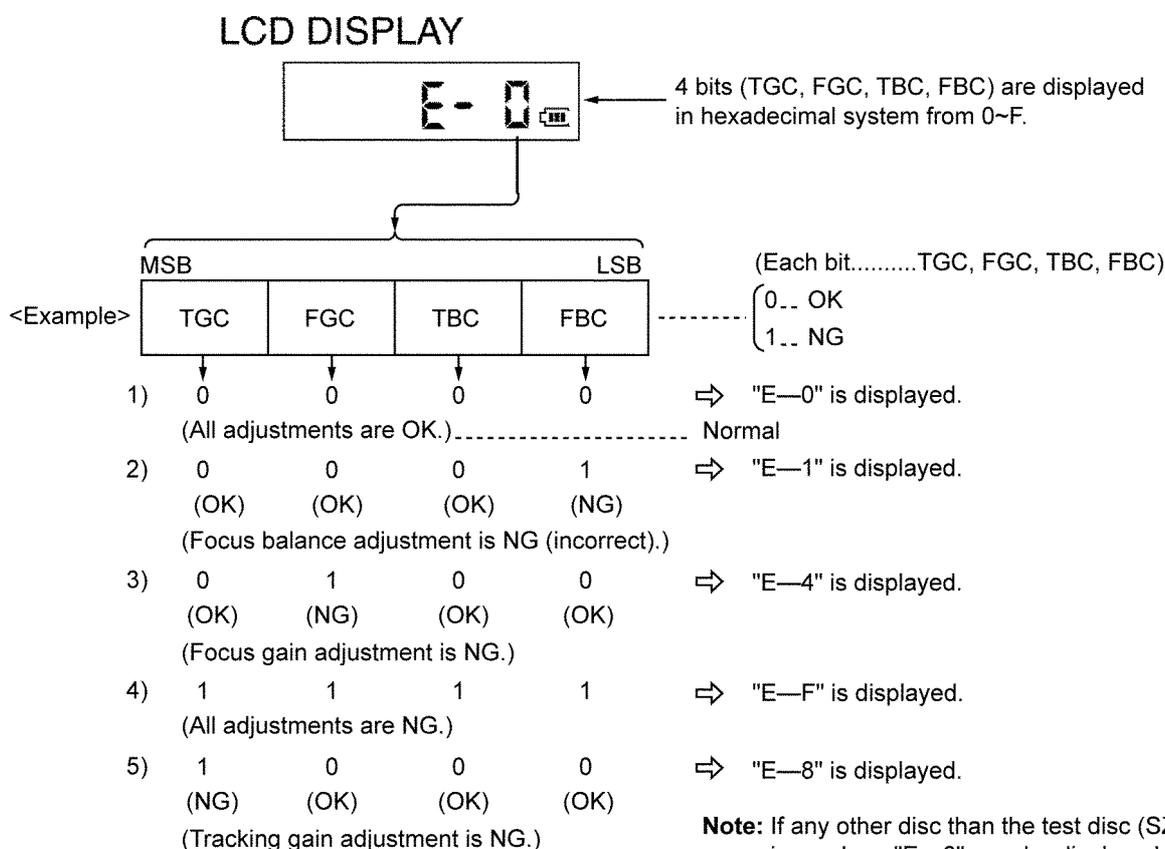
7.1. Automatic Adjustment Results Display Function (Self-check Function)

On this units, each automatic adjustment results are displayed on the LCD. This function is convenient to check or identify which automatic adjustment circuit is incorrect. The followings are the contents of the automatic adjustment results displays (self-check function).

7.1.1. How to display automatic adjustment results

1. Load the test disc (SZZP1054C).
2. Press the ◀◀ (SKIP/SEARCH) and ▶▶ (SKIP/SEARCH) Buttons simultaneously and hold them, and additionally press the ▶/|| (PLAY/PAUSE) Button.
3. Press the ■ (Stop/operation off) Button once.
4. An automatic adjustment result is displayed on the LCD.

7.1.2. Display of automatic adjustment results (self-check function)



Note: If any other disc than the test disc (SZZP1054C) is used, an "E—8" may be displayed.

<Example>

Follow the below steps when "E-1" is displayed.

(Cause: Focus balance (FBC) is set beyond the limit.)

1 Check if

1. the waveform or voltage of the focus servo circuit is correct. (check the waveform or voltage.)
2. the optical pickup returns to the normal state by exchanging the traverse deck.

Follow the below steps when "E-4" is displayed.

(Cause: Focus gain (FGC) is set beyond the limit.)

1 Check if

1. the waveform or voltage of the focus servo circuit is correct. (check the waveform or voltage.)
2. the focus coil of the optical pickup is correct (around 8 ohms).

3. the optical pickup returns to the normal state by exchanging the traverse deck.

Follow the below steps when "E-F" is displayed.

(Cause: All adjustments (TGC, FGC, TBC, FBC) are set beyond the limit.)

1 Check if

1. the optical pickup returns to the normal state by exchanging the traverse deck.
2. the waveform or voltage of the servo IC's are correct. (check the waveform or voltage.)

Note:

It is not always necessary to exchange the traverse deck when an error message is displayed.

Be sure to check if the circuit is defective or not before exchanging the traverse deck.

Note:

If any other disc than the test disc (SZZP1054C) is used, an

error message may be displayed. This is not a malfunction.

K0603YH

Service Manual

Diagrams and Replacement Parts List

Portable CD Player

SL-SX482EE
 SL-SX480EG
 SL-SX475E2
 SL-SX475EB
 SL-SX475EG

Colour
 (S).....Silver Type

Table of contents

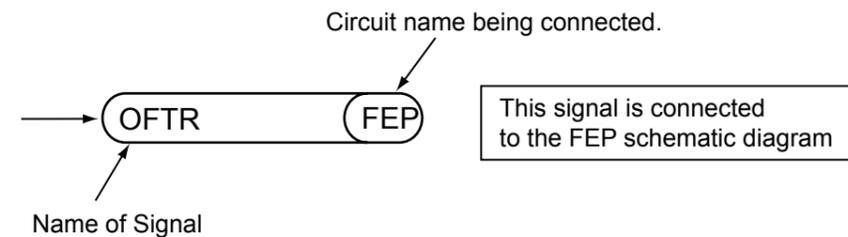
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S1. About Indication of The Schematic Diagram

S1.1. Important Safety Notice

COMPONENTS IDENTIFIED WITH THE MARK \triangle HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS USE ONLY THE SAME TYPE.

1. Although reference number of the parts is indicated on the P.C.B. drawing and/or schematic diagrams, it is NOT mounted on the P.C.B. when it is displayed with "\$" mark.
2. It is only the "Test Round" and no terminal (Pin) is available on the P.C.B. when the TP (Test Point) indicated as "●" mark.
3. The voltage being indicated on the schematic diagram is measured in "Standard-Playback" mode when there is no specify mode is mentioned.
4. Although the voltage and waveform available on here is measured with standard frame, it may be differ from actual measurement due to modification of circuit and so on.
5. The voltage being indicated here may be include observational-error (deviation) due to internal-resistance and/or reactance of equipment. Therefore, handle the value indicated on here as reference.
6. Use the parts number indicated on the Replacement Parts List .
7. Indication on Schematic diagrams:



S2. Voltage Chart

Note) Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.
Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

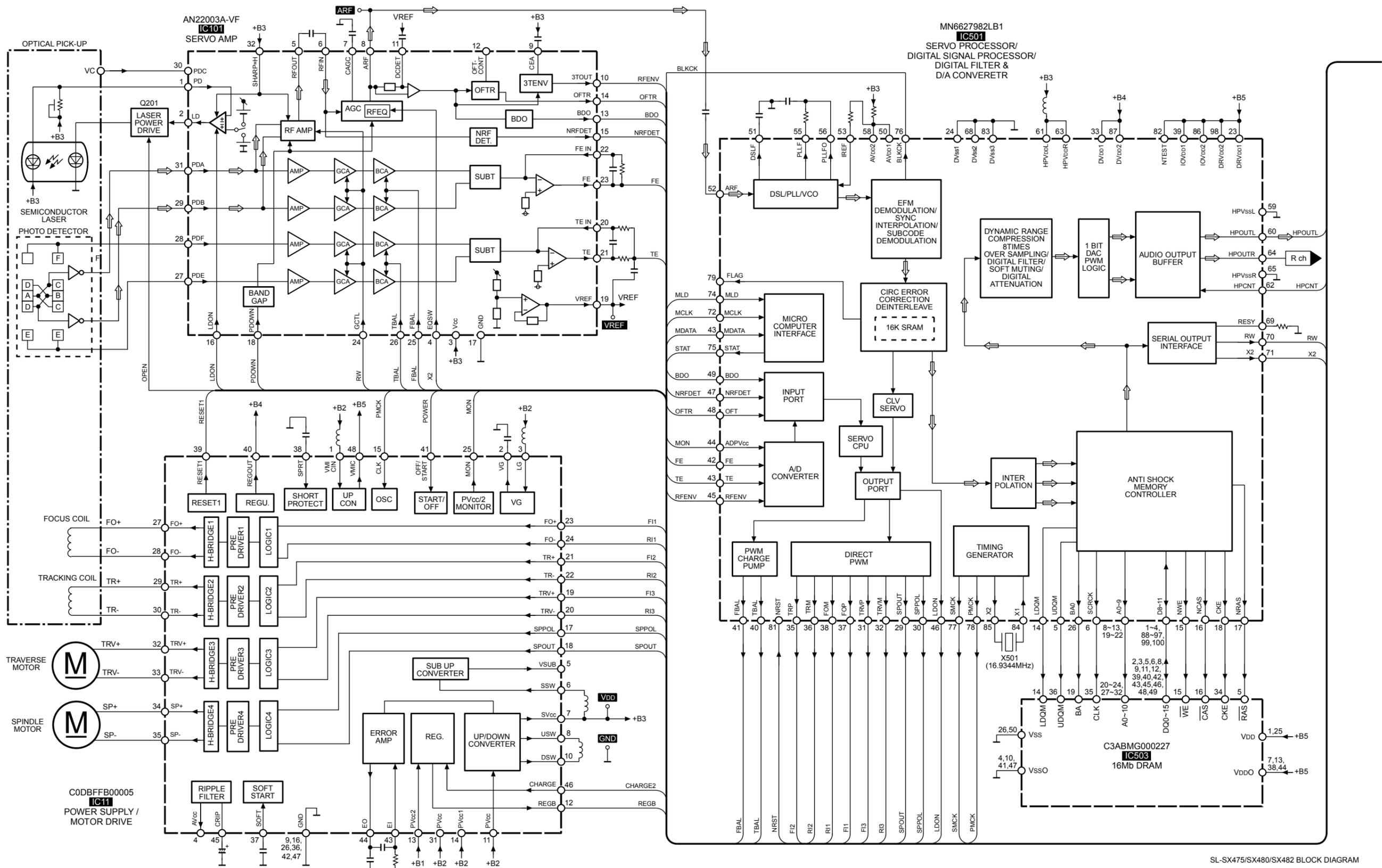
S2.1. Main P.C.B.

REF No.	PIN No.	STOP	PLAY	REF No.	PIN No.	STOP	PLAY	REF No.	PIN No.	STOP	PLAY	REF No.	PIN No.	STOP	PLAY	REF No.	PIN No.	STOP	PLAY	REF No.	PIN No.	STOP	PLAY
IC11	1	2.9	2.9	IC101	15	0	0	IC301	37	0	0	IC501	19	0	1.5	IC501	81	2.9	2.9	IC503	43	0	1.5
IC11	2	5.9	5.9	IC101	16	0	3	IC301	38	3.2	0	IC501	20	3.2	1.6	IC501	82	3.2	3.2	IC503	44	3	3.2
IC11	3	2.8	2.9	IC101	17	0	0	IC301	39	3.2	0	IC501	21	0	1.6	IC501	83	0	0	IC503	45	3.2	1.5
IC11	4	0	0.3	IC101	18	3.2	0	IC301	40	0	3.2	IC501	22	3.2	1.6	IC501	84	1.3	1.3	IC503	46	0	1.5
IC11	5	0	0.3	IC101	19	1.4	1.5	IC301	41	0	0	IC501	23	3.2	3	IC501	85	1.5	1.5	IC503	47	0	0
IC11	6	0	0.2	IC101	20	0.8	1.5	IC301	42	3.2	0	IC501	24	0	0	IC501	86	3.2	1.5	IC503	48	0	1.5
IC11	7	0	3.2	IC101	21	0.8	1.5	IC301	43	0	0	IC501	25	0	0	IC501	87	1.5	1.5	IC503	49	3.2	1.5
IC11	8	0	2.5	IC101	22	0.4	1.5	IC301	44	0	0	IC501	26	1.1	0	IC501	88	3.2	1.5	IC503	50	0	0
IC11	9	0	0	IC101	23	0.4	1.5	IC301	45	1.4	1.4	IC501	27	0	3.2	IC501	89	3.2	1.5	Q11	E	4.5	4.4
IC11	10	0	2.5	IC101	24	0	0	IC301	46	1.4	1.4	IC501	28	3	3.2	IC501	90	3.2	1.5	Q11	C	2.9	2.9
IC11	11	2.9	2.9	IC101	25	1.4	1.9	IC301	47	3.2	3.2	IC501	29	0	0.6	IC501	91	3.2	1.5	Q11	B	3.9	3.8
IC11	12	3.9	3.7	IC101	26	1.4	1.5	IC301	48	0	0	IC501	30	0	0	IC501	92	3.2	1.5	Q12	E	0	0
IC11	13	4.3	4.2	IC101	27	0	2.1	IC301	49	0	0	IC501	31	0	0	IC501	93	0	1.5	Q12	C	2.6	2.6
IC11	14	2.9	2.9	IC101	28	0	2.1	IC301	50	0	0	IC501	32	0	0	IC501	94	0	1.5	Q12	B	0	0
IC11	15	0	1.6	IC101	29	0	1.6	IC301	51	0	0	IC501	33	1.4	1.4	IC501	95	0	1.5	Q13	E	0	0
IC11	16	0	0	IC101	30	0	1.7	IC301	52	0	0	IC501	34	0	0	IC501	96	3.2	1.5	Q13	C	0	0
IC11	17	0	0	IC101	31	0	1.9	IC301	53	1.4	1.4	IC501	35	0	0.1	IC501	97	0	1.5	Q13	B	0	0
IC11	18	0	0.8	IC101	32	3.2	3	IC301	54	1.4	1.4	IC501	36	0	0.1	IC501	98	3.2	3	Q14	E	3.2	3.2
IC11	19	0	0	IC302	1	0	0	IC301	55	1.4	1.4	IC501	37	0	0	IC501	99	0	1.5	Q14	C	0	0
IC11	20	0	0	IC302	2	3.2	3.2	IC301	56	1.4	1.4	IC501	38	0	0.3	IC501	100	3.2	1.5	Q14	B	3.2	3.2
IC11	21	0	0.1	IC302	3	3.2	2.4	IC301	57	1.4	1.4	IC501	39	3.2	3.2	IC503	1	3.2	3.2	Q15	E	0	0
IC11	22	0	0.1	IC302	4	3.2	2.4	IC301	58	1.4	1.4	IC501	40	1.4	1.4	IC503	2	0	1.6	Q15	C	2.9	2.9
IC11	23	0	0	IC302	5	0	0	IC301	59	1.4	1.4	IC501	41	1.2	1.8	IC503	3	0	1.6	Q15	B	0	0
IC11	24	0	0.4	IC302	6	0	0	IC301	60	1.4	1.4	IC501	42	0	1.5	IC503	4	0	0	Q16	E	3.2	3.2
IC11	25	0	0.6	IC302	7	0	0	IC301	61	1.4	1.4	IC501	43	0	1.5	IC503	5	3	1.2	Q16	C	0	0
IC11	26	0	0	IC302	8	3.2	3.2	IC301	62	1.4	1.4	IC501	44	1.7	1.7	IC503	6	0	1.2	Q16	B	2.8	2.8
IC11	27	0	0	IC301	1	3.1	1.5	IC301	63	1.4	1.4	IC501	45	2.9	2.9	IC503	7	3.2	2.7	Q19	E	0	0
IC11	28	0	0.3	IC301	2	3.1	1.5	IC301	64	1.4	1.4	IC501	46	0	3	IC503	8	0	1.6	Q19	C	2.9	2.9
IC11	29	0	0.1	IC301	3	1.8	1.6	IC301	65	1.4	1.4	IC501	47	0	0	IC503	9	3.2	1.6	Q19	B	0	0
IC11	30	0	0	IC301	4	2.9	2.9	IC301	66	1.4	1.4	IC501	48	0	0	IC503	10	0	0	Q31	E	0	0
IC11	31	2.9	2.9	IC301	5	0	0	IC301	67	1.4	1.4	IC501	49	0	0	IC503	11	0	1.5	Q31	C	2.9	2.9
IC11	32	0	0	IC301	6	3.2	3.2	IC301	68	1.4	1.4	IC501	50	3.2	3.2	IC503	12	0	1.5	Q31	B	0	0
IC11	33	0	0	IC301	7	3.2	3.2	IC301	69	1.4	1.4	IC501	51	0	1.5	IC503	13	3.2	3.2	Q102	S	3.2	3
IC11	34	0	0	IC301	8	3.2	3.2	IC301	70	1.4	1.4	IC501	52	0	1.5	IC503	14	3.2	3.2	Q102	D	0.8	3
IC11	35	0	0.7	IC301	9	3.2	3.2	IC301	71	3.2	3.2	IC501	53	0.8	0.8	IC503	15	3.2	3.2	Q102	G	3.2	0
IC11	36	0	0	IC301	10	3.2	3.2	IC301	72	3.2	3.2	IC501	54	0	0	IC503	16	3.2	3.2	Q201	E	3.2	3.2
IC11	37	0	1.4	IC301	11	2.9	2.9	IC301	73	0	0	IC501	55	0	1.2	IC503	17	3.2	3.2	Q201	C	1.2	1.8
IC11	38	0	0.1	IC301	12	3.2	3.2	IC301	74	1.4	1.4	IC501	56	0	1.2	IC503	18	0	0	Q201	B	2.6	2.6
IC11	39	0	2.9	IC301	13	0	0	IC301	75	1.4	1.4	IC501	57	0	0	IC503	19	0	3.2	Q502	S	0	0
IC11	40	0	1.5	IC301	14	0	0	IC301	76	0	0	IC501	58	3.2	3.2	IC503	20	0	0	Q502	D	2.9	2.9
IC11	41	0	0	IC301	15	0	0	IC301	77	1.4	1.4	IC501	59	0	0	IC503	21	3.2	1.7	Q502	G	0	0
IC11	42	0	0	IC301	16	2.9	2.9	IC301	78	3	3	IC501	60	0	1.5	IC503	22	0	1.6	Q704	1	0	0
IC11	43	0	0.9	IC301	17	2.9	2.9	IC301	79	1.9	1.9	IC501	61	3.2	3.2	IC503	23	0	1.6	Q704	2	0.7	0
IC11	44	0	0.6	IC301	18	3.1	3.1	IC301	80	1	1	IC501	62	3.2	3.2	IC503	24	0	1.6	Q704	3	0	0
IC11	45	0	0.3	IC301	19	2.5	2.5	IC501	1	3.2	1.5	IC501	63	3.2	3.2	IC503	25	3.2	3.2	Q704	4	0	0
IC11	46	0	0	IC301	20	0	0.8	IC501	2	3.2	1.5	IC501	64	1.4	1.4	IC503	26	0	0	Q704	5	0.7	0
IC11	47	0	0	IC301	21	0	0	IC501	3	0	1.5	IC501	65	0	0	IC503	27	0	1.4	Q704	6	0	0
IC11	48	3.2	3.2	IC301	22	0	0	IC501	4	3.2	1.5	IC501	66	0	0	IC503	28	0	1.4	Q901	E	3.2	3.2
IC101	1	0.9	2.9	IC301	23	3.2	3.2	IC501	5	3.2	3.2	IC501	67	1.5	1.5	IC503	29	0	1.4	Q901	C	3.2	0
IC101	2	2.6	2.6	IC301	24	2.9	2.9	IC501	6	0.1	0.1	IC501	68	0	0	IC503	30	0	1.4	Q901	B	0	3
IC101	3	3.2	2.9	IC301	25	2.9	2.9	IC501	7	0	0	IC501	69	0	3.2	IC503	31	0	0	Q902	E	0	0
IC101	4	0	3	IC301	26	0	0	IC501	8	0	0	IC501	70	0	0	IC503	32	0	0	Q902	C	0	3
IC101	5	0	1.2	IC301	27	0	0	IC501	9	0	0	IC501	71	0	3.2	IC503	33	0	0	Q902	B	0	0
IC101	6	0	1.7	IC301	28	1.5	1.5	IC501	10	0	1.4	IC501	72	3.2	3.2	IC503	34	0.1	0.1	Q903	E	3.2	3.2
IC101	7	0	1.3	IC301	29	1.4	1.4	IC501	11	0	1.4	IC501	73	3.2	2.5	IC503	35	0.1	0.1	Q903	C	0	0
IC101	8	0	1.5	IC301	30	0	0	IC501	12	0	1.6	IC501	74	3.2	3.2	IC503	36	3.2	3	Q903	B	3.2	3.2
IC101	9	1.9	1.4	IC301	31	3.2	3.2	IC501	13	0	1.6	IC501	75	0	0.6	IC503	37	0	0	Q905	E	0	0
IC101	10	2.9	1.5	IC301	32	3	3	IC501	14	3.2	3.2	IC501	76	0	0	IC503	38	3.2	3	Q905	C	0	3
IC101	11	0	1.5	IC301	33	0	0	IC501	15	3.2	3.2	IC501	77	3.2	1.4	IC503	39	0	1.6	Q905	B	3.2	0
IC101	12	1.3	1.3	IC301	34	0	0	IC501	16	3.2	3.2	IC501	78	3.2	1.6	IC503	40	0	1.6				
IC101	13	0	0	IC301	35	3	3	IC501	17	3.2	3.2	IC501	79	0	0.1	IC503	41	0	0				
IC101	14	0	0	IC301	36	3.2	3.2	IC501	18	0.1	0.2	IC501	80	3.1	3.1	IC503	42	0	1.5				

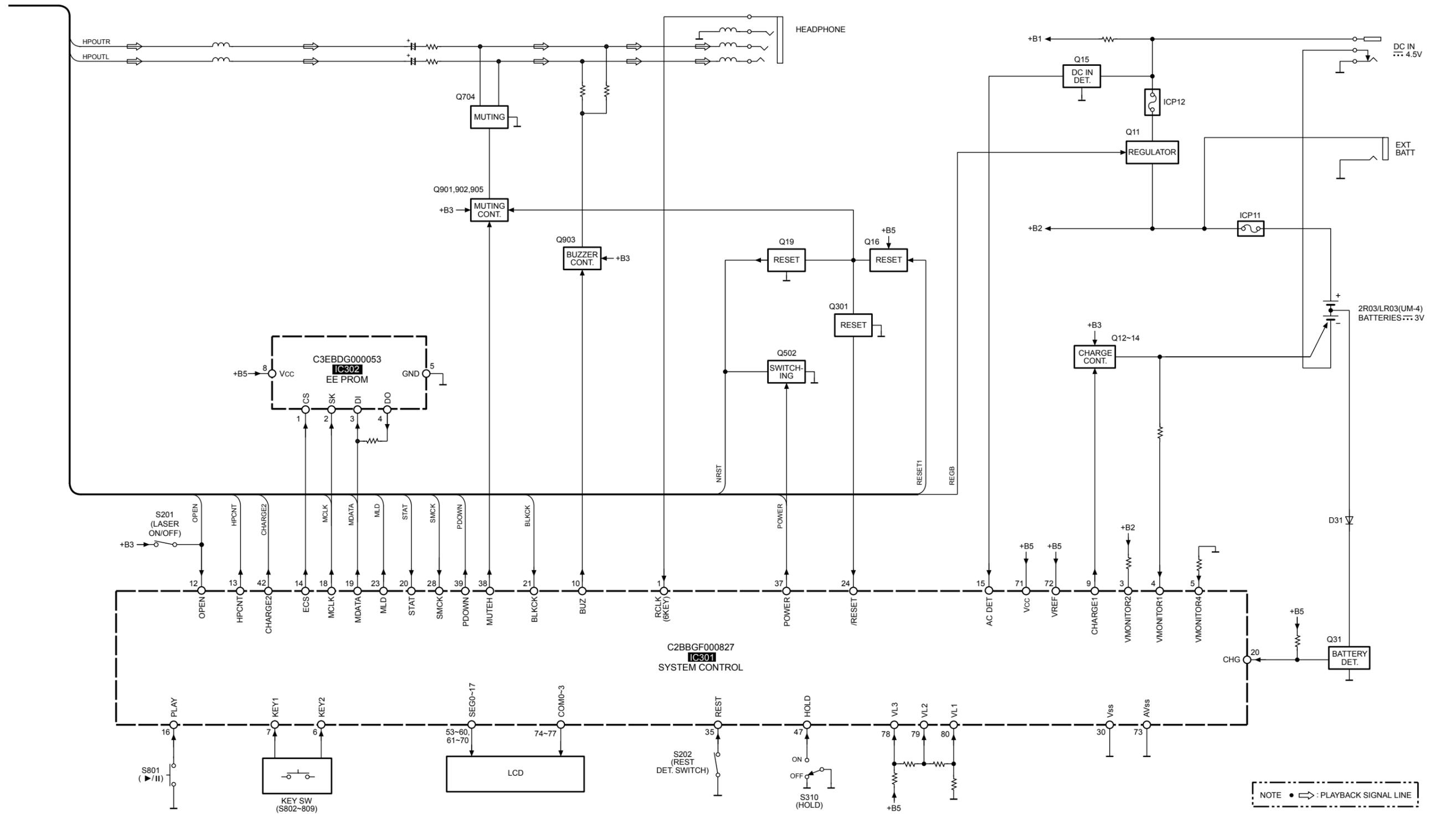
S3. Block Diagram

S3.1. Overall Block Diagram

S3.1.1. Overall Block Diagram (1)

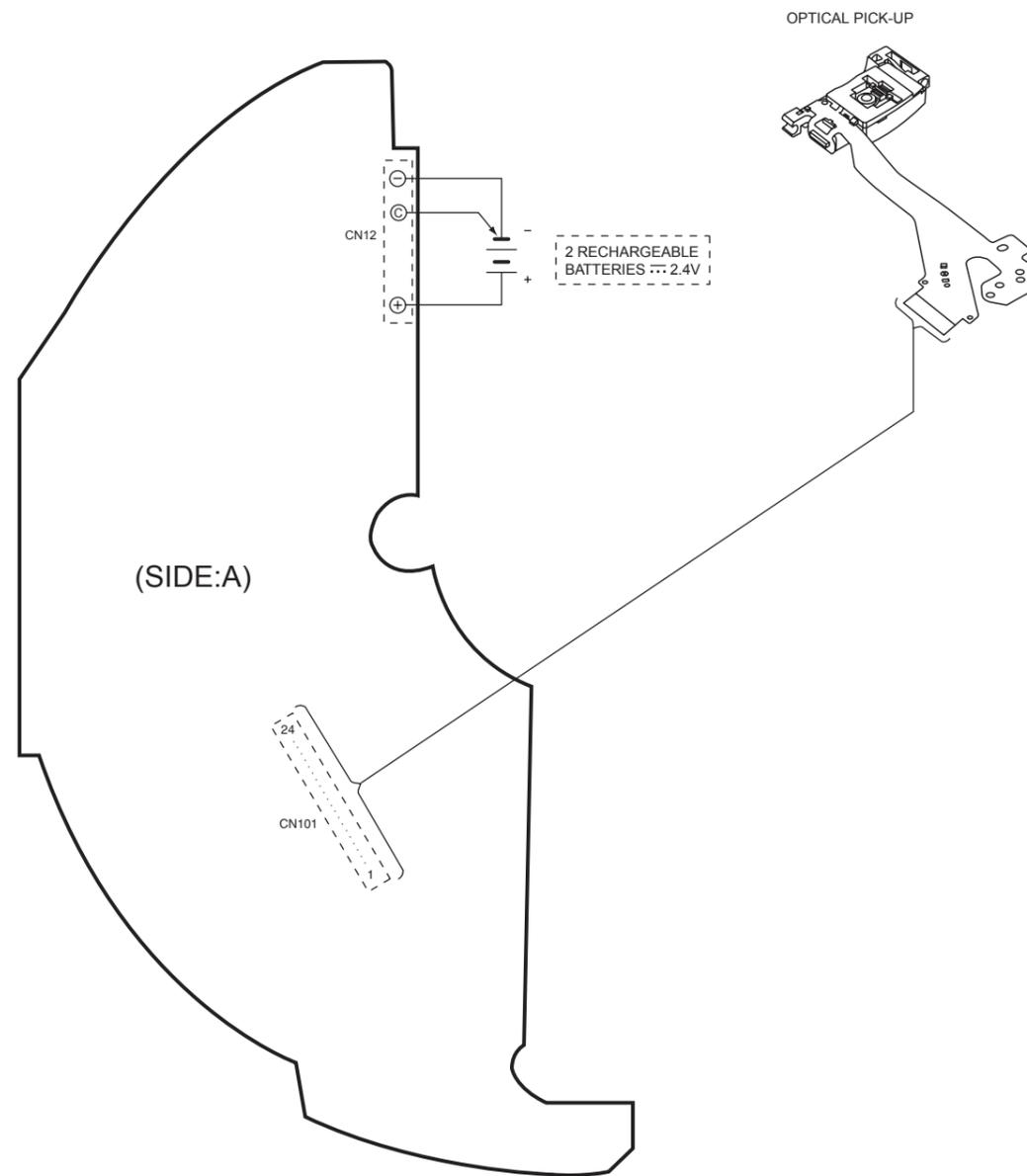


S3.1.2. Overall Block Diagram (2)



S4. Schematic Diagram

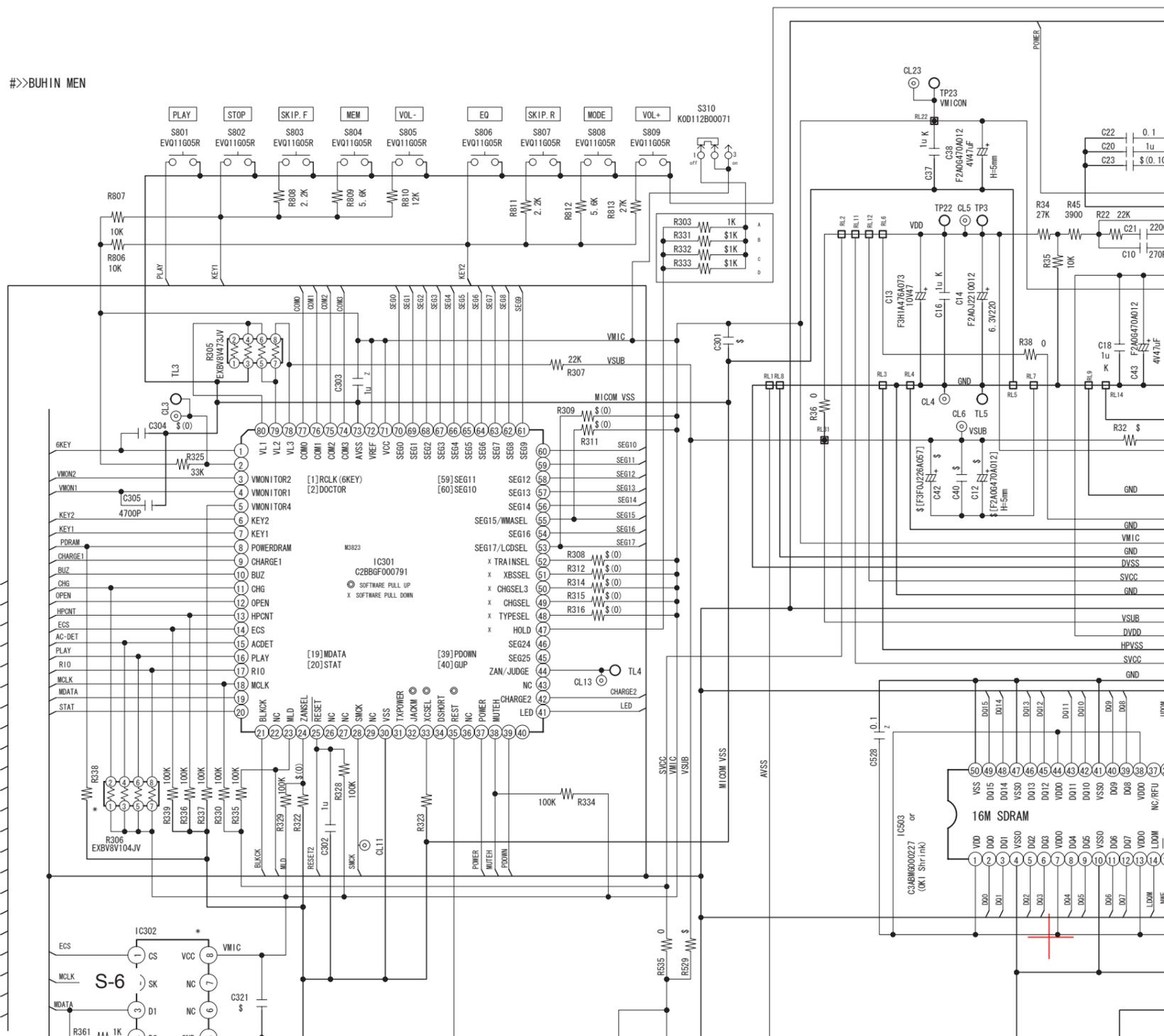
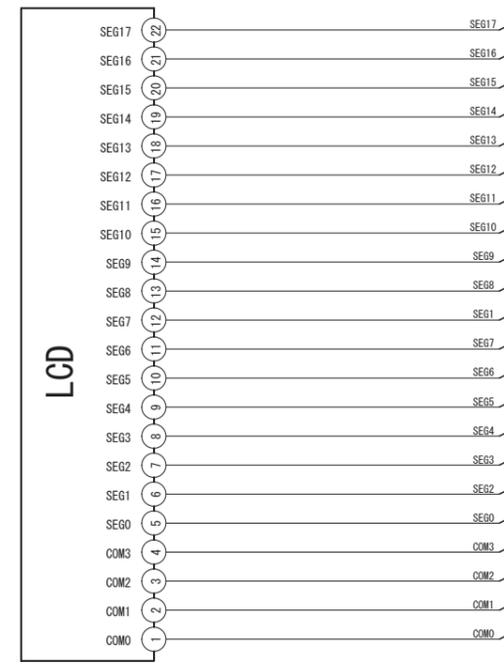
S4.1. Interconnection Diagram

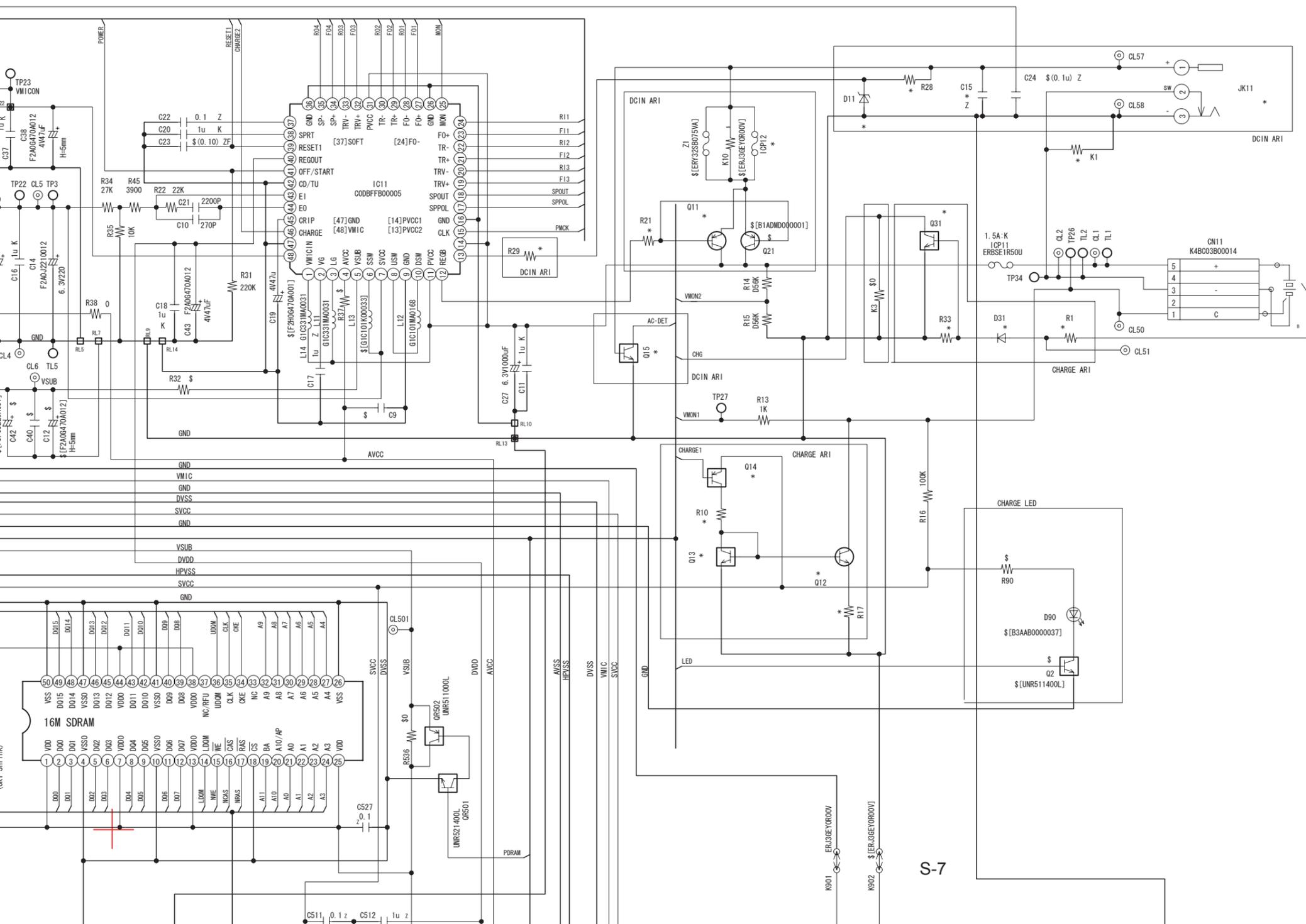


S4.2. Main Schematic Diagram

VariationCategory	SX470P_PC	SX480P_PC	SX480oother
C15	\$(F1H1A105A030)	\$(F1H1A105A030)	F1H1A105A030
C504	F1H1C104A008	F1H1E223A029	F1H1E223A029
C505	F1H1E223A029	F1H1C104A008	F1H1C104A008
D11	\$(MAZ80560ML)	\$(MAZ80560ML)	MAZ80560ML
D31	\$(MAZJ11100L)	\$(MAZJ11100L)	MAZJ11100L
IC302	\$(C3EBD6000053)	\$(C3EBD6000053)	C3EBD6000053
IC501	MN6627935CM	MN6627982LB	MN6627982LB
ICP12	\$(ERBSE1R00U)	\$(ERBSE1R00U)	ERBSE1R00U
JK11	\$(K2EB2B000019)	\$(K2EB2B000019)	K2EB2B000019
K1	ERJ3GEY0R00V	ERJ3GEY0R00V	\$(ERJ3GEY0R00V)
K503	ERJ3GEY0R00V	\$(ERJ3GEY0R00V)	\$(ERJ3GEY0R00V)
K504	ERJ3GEY0R00V	\$(ERJ3GEY0R00V)	\$(ERJ3GEY0R00V)
K505	ERJ3GEY0R00V	\$(ERJ3GEY0R00V)	\$(ERJ3GEY0R00V)
K507	ERJ3GEY0R00V	\$(ERJ3GEY0R00V)	\$(ERJ3GEY0R00V)
K521	\$(ERJ3GEY0R00V)	ERJ3GEY0R00V	ERJ3GEY0R00V
K522	\$(ERJ3GEY0R00V)	ERJ3GEY0R00V	ERJ3GEY0R00V
K523	\$(ERJ3GEY0R00V)	ERJ3GEY0R00V	ERJ3GEY0R00V
K524	\$(ERJ3GEY0R00V)	ERJ3GEY0R00V	ERJ3GEY0R00V
K525	\$(ERJ3GEY0R00V)	ERJ3GEY0R00V	ERJ3GEY0R00V
K526	\$(ERJ3GEY0R00V)	ERJ3GEY0R00V	ERJ3GEY0R00V
K527	\$(ERJ3GEY0R00V)	ERJ3GEY0R00V	ERJ3GEY0R00V
Q11	\$(B1BDND000001)	\$(B1BDND000001)	B1BDND000001
Q12	\$(B1ABMD000004)	\$(B1ABMD000004)	B1ABMD000004
Q13	\$(UNR521L00L)	\$(UNR521L00L)	UNR521L00L
Q14	\$(UNR511400L)	\$(UNR511400L)	UNR511400L
Q15	\$(B1GBCFJ60004)	\$(B1GBCFJ60004)	B1GBCFJ60004
Q31	\$(UNR521500L)	\$(UNR521500L)	UNR521500L
R1	\$(D0YBR0000010)	\$(D0YBR0000010)	D0YBR0000010
R10	\$(ERJ3GEYJ271V)	\$(ERJ3GEYJ271V)	ERJ3GEYJ271V
R17	\$(ERJ12YJ1RSU)	\$(ERJ12YJ1RSU)	ERJ12YJ1RSU
R21	\$(ERJ3GEYJ100V)	\$(ERJ3GEYJ100V)	ERJ3GEYJ100V
R28	\$(ERJ3GEYJ271V)	\$(ERJ3GEYJ271V)	ERJ3GEYJ271V
R29	\$(ERJ3GEYJ560V)	\$(ERJ3GEYJ560V)	ERJ3GEYJ560V
R33	\$(ERJ3GEYJ474V)	\$(ERJ3GEYJ474V)	ERJ3GEYJ474V
R323	\$(ERJ3GEY0R00V)	\$(ERJ3GEY0R00V)	ERJ3GEY0R00V
R338	\$(ERJ3GEYJ104V)	ERJ3GEYJ104V	ERJ3GEYJ104V
R502	ERJ3GEYJ823V	\$(ERJ3GEYJ823V)	\$(ERJ3GEYJ823V)
R503	\$(ERJ3GEYJ823V)	ERJ3GEYJ823V	ERJ3GEYJ823V

#>>BUHIN MEN







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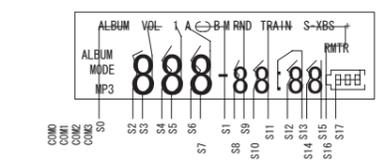
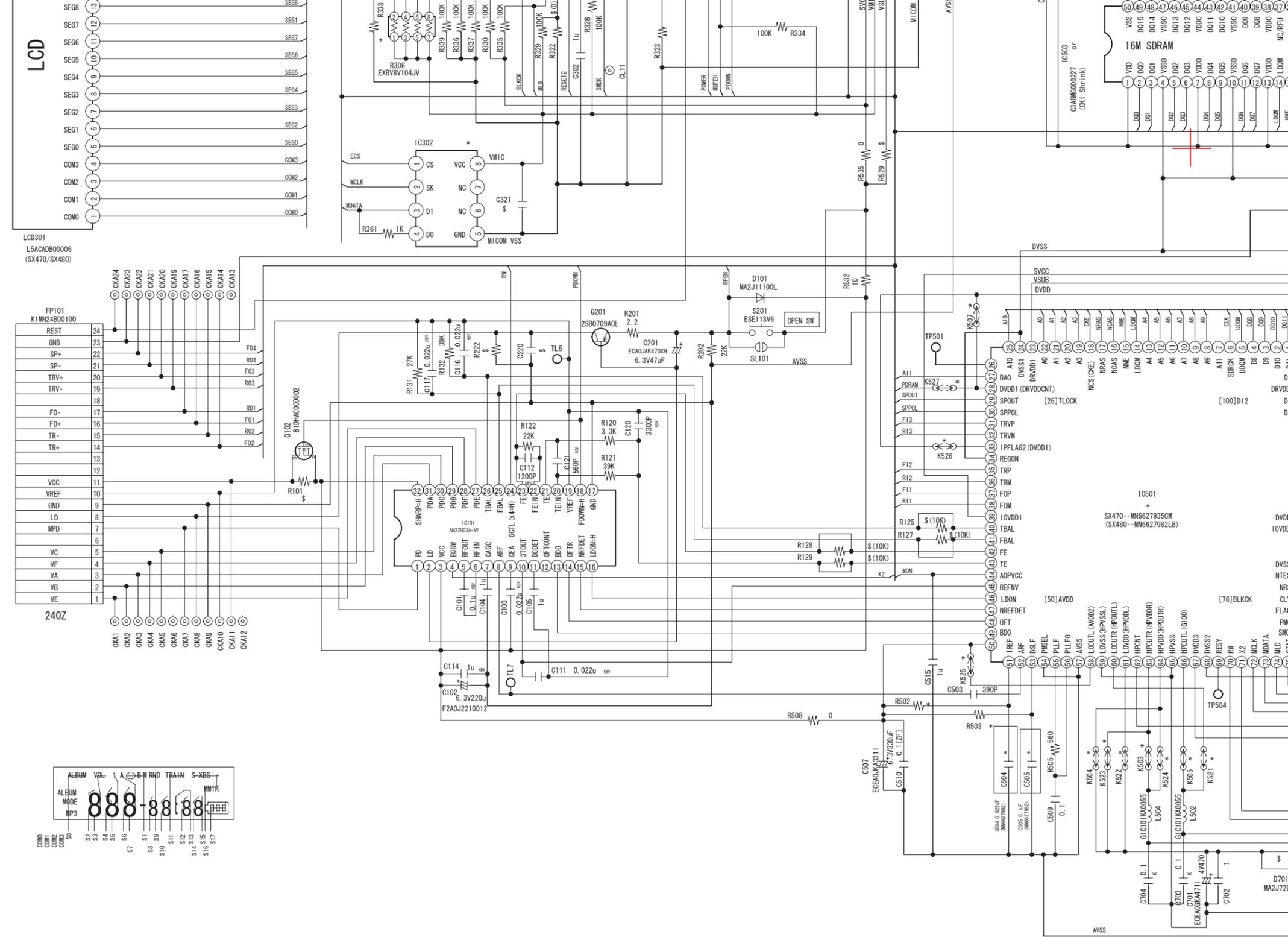
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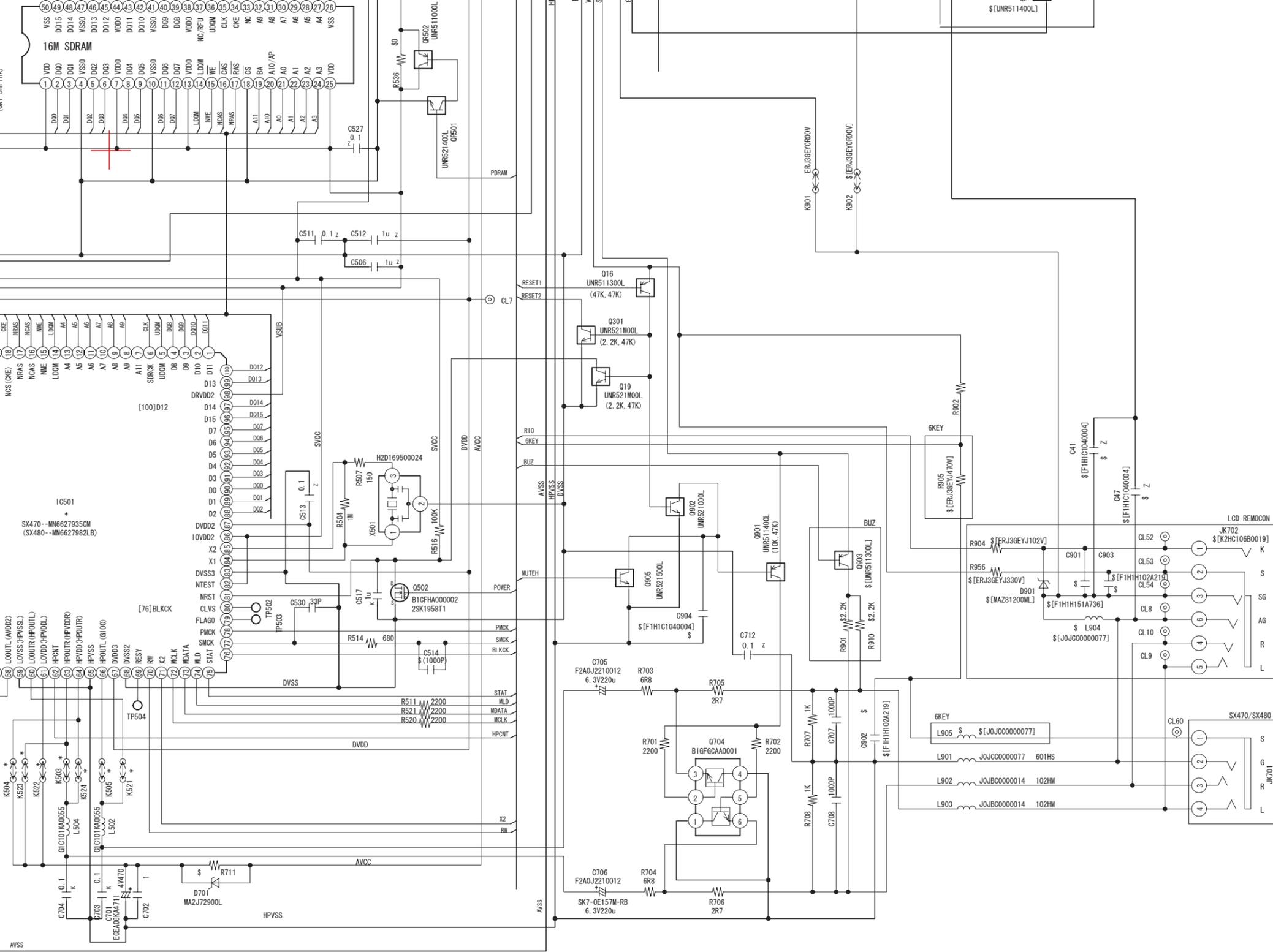
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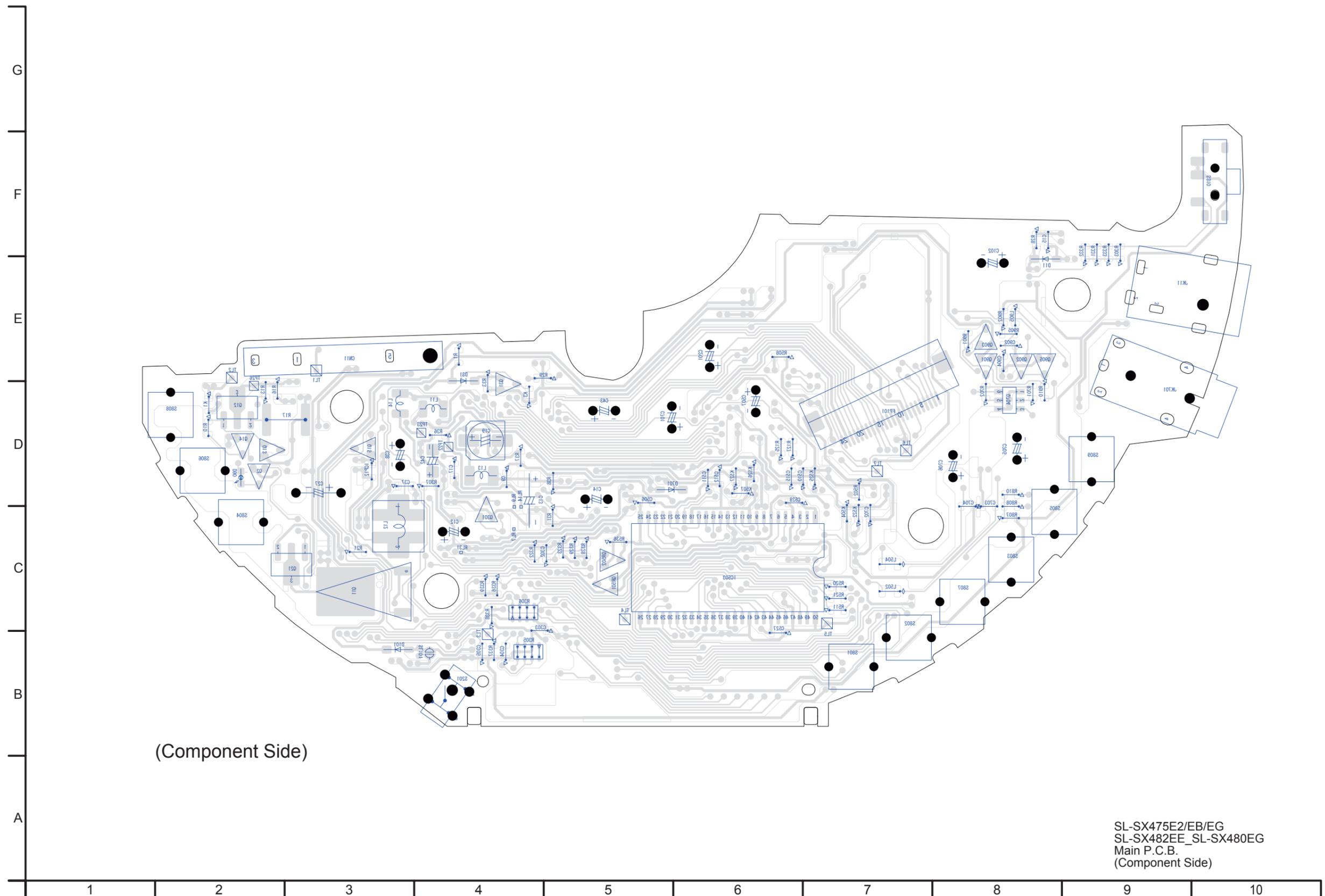




S5. Print Circuit Board

S5.1. Main P.C.B.

S5.1.1. Main P.C.B. (Component Side)



(Component Side)

SL-SX475E2/EB/EG
SL-SX482EE_SL-SX480EG
Main P.C.B.
(Component Side)

S5.1.2. Main P.C.B. (Foil Side)



(Foil Side)

SL-SX475E2/EB/EG
SL-SX482EE_SL-SX480EG
Main P.C.B.
(Foil Side)

S6. Replacement Parts List

- Note:
- 1.* Be sure to make your orders of replacement parts according to this list.
 2. IMPORTANT SAFETY NOTICE
Components identified with the mark \triangle have the special characteristics for safety.
When replacing any of these components, use only the same type.
 3. Unless otherwise specified,
All resistors are in OHMS, K=1,000 OHMS. All capacitors are in MICRO-FARADS (uf), P=uuF.
 4. The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

E.S.D. standards for Electrostatically Sensitive Devices, refer to “PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES” section.

SL-SX480EG-S

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
##	REP3961B-M	MAIN P.C.B. ASS'Y		(RTL)(SX482)
##	REP3961D-M	MAIN P.C.B. ASS'Y		(RTL)(SX480)(SX475)
C10	ECUV1H271JCV	50V 270P	1	
C11	F1H1A105A028	10V 1U	1	
C13	F3H1A476A073	10V 47U	1	
C14	F2A0J2210012	6.3V 220U	1	
C15	F1H1A105A030	10V 1U	1	
C16	F1H1A105A025	10V 1U	1	
C17	ECUV1A105ZFBV	10V 1U	1	
C18	F1H1A105A025	10V 1U	1	
C20	F1H1A105A025	10V 1U	1	
C21	F1H1H222A219	50V 2200P	1	
C22	ECUZ1C104ZFBV	16V 0.1U	1	
C27	F2A0J102A130	6.3V 1000U	1	
C37	F1H1A105A025	10V 1U	1	
C38	F2A0G470A012	4V 47U	1	
C43	F2A0G470A012	4V 47U	1	
C101	F1H1C104A042	16V 0.1U	1	
C102	F2A0J2210012	6.3V 220U	1	
C103	ECUV1E223KBV	25V 0.022U	1	
C104	F1H1A105A028	10V 1U	1	
C105	F1H1A105A028	10V 1U	1	
C111	ECUV1E223KBV	25V 0.022U	1	
C112	ECUV1H122KBV	50V 1200P	1	
C114	F1H1A105A028	10V 1U	1	
C116	ECUV1E223KBV	25V 0.022U	1	
C117	ECUV1E223KBV	25V 0.022U	1	
C120	ECUV1H332KBV	50V 3300P	1	
C121	ECUV1H561KBV	50V 560P	1	
C201	ECA0JAK470XH	6.3V 47U	1	
C302	F1H1A105A025	10V 1U	1	
C303	ECUV1A105ZFBV	10V 1U	1	
C305	F1H1H472A219	50V 4700P	1	
C503	ECJ1VC1H391J	50V 390P	1	
C504	ECUV1E223KBV	25V 0.022U	1	
C505	F1H1C104A008	16V 0.1U	1	
C506	ECUV1A105ZFBV	10V 1U	1	
C507	ECEA0JKA331I	6.3V 330U	1	
C509	F1H1C104A042	16V 0.1U	1	
C510	F1H1C104A008	16V 0.1U	1	
C511	F1H1C104A008	16V 0.1U	1	
C512	ECUV1A105ZFBV	10V 1U	1	
C513	F1H1C104A008	16V 0.1U	1	
C515	F1H1A105A028	10V 1U	1	
C517	F1H1A105A025	10V 1U	1	
C527	F1H1C104A008	16V 0.1U	1	
C528	F1H1C104A008	16V 0.1U	1	
C530	ECUV1H330JCV	50V 33P	1	
C701	ECEA0GKA471I	4V 470U	1	
C702	F1H1A105A025	10V 1U	1	
C703	F1H1C104A042	16V 0.1U	1	
C704	F1H1C104A042	16V 0.1U	1	
C705	F2A0J2210012	6.3V 220U	1	
C706	F2A0J2210012	6.3V 220U	1	
C707	F1H1H102A219	50V 1000P	1	
C708	F1H1H102A219	50V 1000P	1	
C712	F1H1C104A008	16V 0.1U	1	
CN11	K4ZZ02000079	BATTERY TERMINAL	1	
D11	MAZ80560ML	DIODE	1	
D31	MA2J11100L	DIODE	1	
D101	MA2J11100L	DIODE	1	
D701	MA2J72900L	DIODE	1	
FP101	K1MN24B00108	CONNECTOR(24P)	1	
IC11	C0DBFFB00005	IC	1	
IC101	AN22003A-VF	IC	1	
IC301	C2BBGF000827	MICOM IC	1	
IC302	C3EBDG000053	IC	1	
IC501	MN6627982LB1	IC	1	
IC503	C3ABMG000227	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
ICP11	ERBSE1R50U	IC PROTECTOR	1	
ICP12	ERBSE1R00U	IC PROTECTOR	1	
JK11	K2EB2B000019	JK,DC IN	1	
JK701	K2HC104B0013	JACK,HEADPHONE	1	(SX482)
JK701	K2HC1YB0001	JACK,HEADPHONE	1	(SX480)(SX475)
K521	ERJ3GEY0R00V	1/10W 0	1	
K522	ERJ3GEY0R00V	1/10W 0	1	
K523	ERJ3GEY0R00V	1/10W 0	1	
K524	ERJ3GEY0R00V	1/10W 0	1	
K525	ERJ3GEY0R00V	1/10W 0	1	
K526	ERJ3GEY0R00V	1/10W 0	1	
K527	ERJ3GEY0R00V	1/10W 0	1	
K901	ERJ3GEY0R00V	1/10W 0	1	
L11	G1C331MA0031	COIL	1	
L12	G1C101MA0168	COIL	1	
L14	G1C331MA0031	COIL	1	
L502	G1C101KA0055	CHIP INDUCTOR	1	
L504	G1C101KA0055	CHIP INDUCTOR	1	
L901	J0JCC0000077	COIL	1	
L902	J0JBC0000014	COIL	1	
L903	J0JBC0000014	COIL	1	
L905	J0JCC0000077	COIL	1	(SX482)
LCD301	L5ACADB00006	LCD	1	
PCB1	REP3961D-M	MAIN PCB ASS'Y	1	(RTL)(SX480)(SX475)
PCB1	REP3961B-M	MAIN PCB ASS'Y	1	(RTL)(SX482)
Q11	B1BDND000001	TRANSISTOR	1	
Q12	B1ABMD000004	TRANSISTOR	1	
Q13	UNR521L00L	TRANSISTOR	1	
Q14	UNR511400L	TRANSISTOR	1	
Q15	B1GBCFJG0004	TRANSISTOR	1	
Q16	UNR511300L	TRANSISTOR	1	
Q19	UNR521M00L	TRANSISTOR	1	
Q31	UNR521500L	TRANSISTOR	1	
Q102	B1DHAC000002	TRANSISTOR	1	
Q201	2SB0709A0L	TRANSISTOR	1	
Q301	UNR521M00L	TRANSISTOR	1	
Q502	B1CFHA000002	TRANSISTOR	1	
Q704	B1GFGCAA0001	TRANSISTOR	1	
Q901	UNR511400L	TRANSISTOR	1	
Q902	UNR521000L	TRANSISTOR	1	
Q903	UNR511300L	TRANSISTOR	1	(SX482)
Q905	UNR521400L	TRANSISTOR	1	
R1	D0YBR0000010	CHIP RING	1	
R10	ERJ3GEYJ271V	1/10W 270	1	
R13	ERJ3GEYJ102V	1/10W 1K	1	
R14	ERJ3RBD563V	1/16W 56K	1	
R15	ERJ3RBD563V	1/16W 56K	1	
R16	ERJ3GEYJ104V	1/10W 100K	1	
R17	ERJ12YJ1R5U	1/2W 1.5	1	(SX482)
R17	ERJ12YJ1R8U	1/2W 1.8	1	(SX480)(SX475)
R21	ERJ3GEYJ100V	1/10W 10	1	
R22	ERJ3GEYJ223V	1/10W 22K	1	
R28	ERJ3GEYJ271V	1/10W 270	1	
R29	ERJ3GEYJ560V	1/10W 56	1	
R31	ERJ3GEYJ224V	1/10W 220K	1	
R33	ERJ3GEYJ474V	1/10W 470K	1	
R34	ERJ3GEYJ273V	1/10W 27K	1	
R35	ERJ3GEYJ103V	1/10W 10K	1	
R36	ERJ3GEY0R00V	1/10W 0	1	
R38	ERJ3GEY0R00V	1/10W 0	1	
R45	ERJ3GEYJ392V	1/10W 3.9K	1	
R120	ERJ3GEYJ332V	1/10W 3.3K	1	
R121	ERJ3GEYJ393V	1/10W 39K	1	
R122	ERJ3GEYJ223V	1/10W 22K	1	
R131	ERJ3GEYJ683V	1/10W 68K	1	
R132	ERJ3GEYJ393V	1/10W 39K	1	
R201	ERJ3GEYJ2R2V	1/10W 2.2	1	

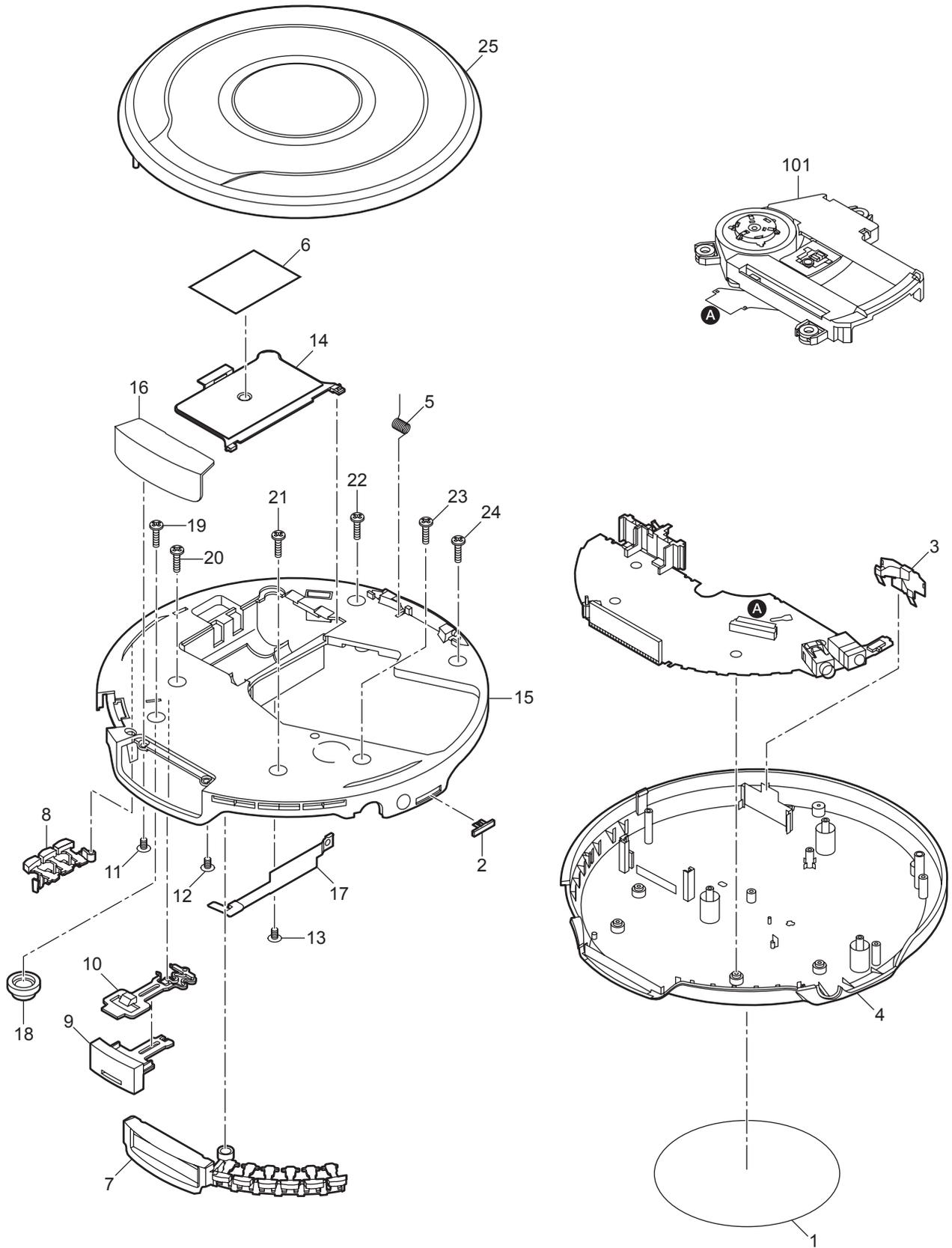
SL-SX480EG-S

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R202	ERJ3GEYJ223V	1/10W 22K	1	
R305	EXBV8V473JV	1/16W 47K	1	
R306	EXBV8V104JV	1/16W 100K	1	
R307	ERJ3GEYJ103V	1/10W 10K	1	
R323	ERJ3GEY0R00V	1/10W 0	1	
R325	ERJ3GEYJ333V	1/10W 33K	1	
R328	ERJ3GEYJ104V	1/10W 100K	1	
R329	ERJ3GEYJ104V	1/10W 100K	1	
R330	ERJ3GEYJ104V	1/10W 100K	1	
R331	ERJ3GEYJ102V	1/10W 1K	1	(SX482)
R333	ERJ3GEYJ102V	1/10W 1K	1	(SX480)(SX475)
R335	ERJ3GEYJ104V	1/10W 100K	1	
R336	ERJ3GEYJ104V	1/10W 100K	1	
R337	ERJ3GEYJ104V	1/10W 100K	1	
R338	ERJ3GEYJ104V	1/10W 100K	1	
R339	ERJ3GEYJ104V	1/10W 100K	1	
R361	ERJ3GEYJ102V	1/10W 1K	1	
R503	ERJ3GEYJ823V	1/10W 82K	1	
R504	ERJ3GEYJ105V	1/10W 1M	1	
R505	ERJ3GEYJ561V	1/10W 560	1	
R507	ERJ3GEYJ102V	1/10W 1K	1	
R508	ERJ3GEY0R00V	1/10W 0	1	
R511	ERJ3GEYJ222V	1/10W 2.2K	1	
R514	ERJ3GEYJ681V	1/10W 680	1	
R516	ERJ3GEYJ104V	1/10W 100K	1	
R520	ERJ3GEYJ222V	1/10W 2.2K	1	
R521	ERJ3GEYJ222V	1/10W 2.2K	1	
R532	ERJ3GEYJ100V	1/10W 10	1	
R535	ERJ3GEY0R00V	1/10W 0	1	
R536	ERJ3GEY0R00V	1/10W 0	1	
R701	ERJ3GEYJ222V	1/10W 2.2K	1	
R702	ERJ3GEYJ222V	1/10W 2.2K	1	
R703	ERJ3GEYJ6R8V	1/10W 6.8	1	
R704	ERJ3GEYJ6R8V	1/10W 6.8	1	
R705	ERJ3GEYJ2R7V	1/10W 2.7	1	
R706	ERJ3GEYJ2R7V	1/10W 2.7	1	
R707	ERJ3GEYJ102V	1/10W 1K	1	
R708	ERJ3GEYJ102V	1/10W 1K	1	
R806	ERJ3GEYJ103V	1/10W 10K	1	
R807	ERJ3GEYJ103V	1/10W 10K	1	
R808	ERJ3GEYJ222V	1/10W 2.2K	1	
R809	ERJ3GEYJ562V	1/10W 5.6K	1	
R810	ERJ3GEYJ123V	1/10W 12K	1	
R811	ERJ3GEYJ222V	1/10W 2.2K	1	
R812	ERJ3GEYJ562V	1/10W 5.6K	1	
R813	ERJ3GEYJ273V	1/10W 27K	1	
R901	ERJ3GEYJ222V	1/10W 2.2K	1	(SX482)
R902	ERJ3GEYJ223V	1/10W 22K	1	
R905	ERJ3GEYJ470V	1/10W 47	1	(SX482)
R910	ERJ3GEYJ222V	1/10W 2.2K	1	(SX482)
S201	ESE11SV6	SW,LASER ON/OFF	1	
S310	K0D112B00071	SW,HOLD	1	
S801	EVQ11G05R	SW,OPERATION	1	
S802	EVQ11G05R	SW,OPERATION	1	
S803	EVQ11G05R	SW,OPERATION	1	
S804	EVQ11G05R	SW,OPERATION	1	
S805	EVQ11G05R	SW,OPERATION	1	
S806	EVQ11G05R	SW,OPERATION	1	
S807	EVQ11G05R	SW,OPERATION	1	
S808	EVQ11G05R	SW,OPERATION	1	
S809	EVQ11G05R	SW,OPERATION	1	
X501	H2D169500024	OSCILLATOR	1	
##		CABINET PARTS		
1	RGN2877-H	NAME PLATE	1	(SX480)
1	RGN2904-H	NAME PLATE	1	(SX482)
1	RGN2889-H	NAME PLATE	1	(SX475)
2	RGV0352-S	HOLD KNOB	1	
3	RJC93038-3	BATTERY TERMINAL	1	
4	RKS0418-1H	BOTTOM CAB	1	
5	RMB0839-2	OPEN SPRING	1	
6	RQLS0244-1	LASER LABEL	1	

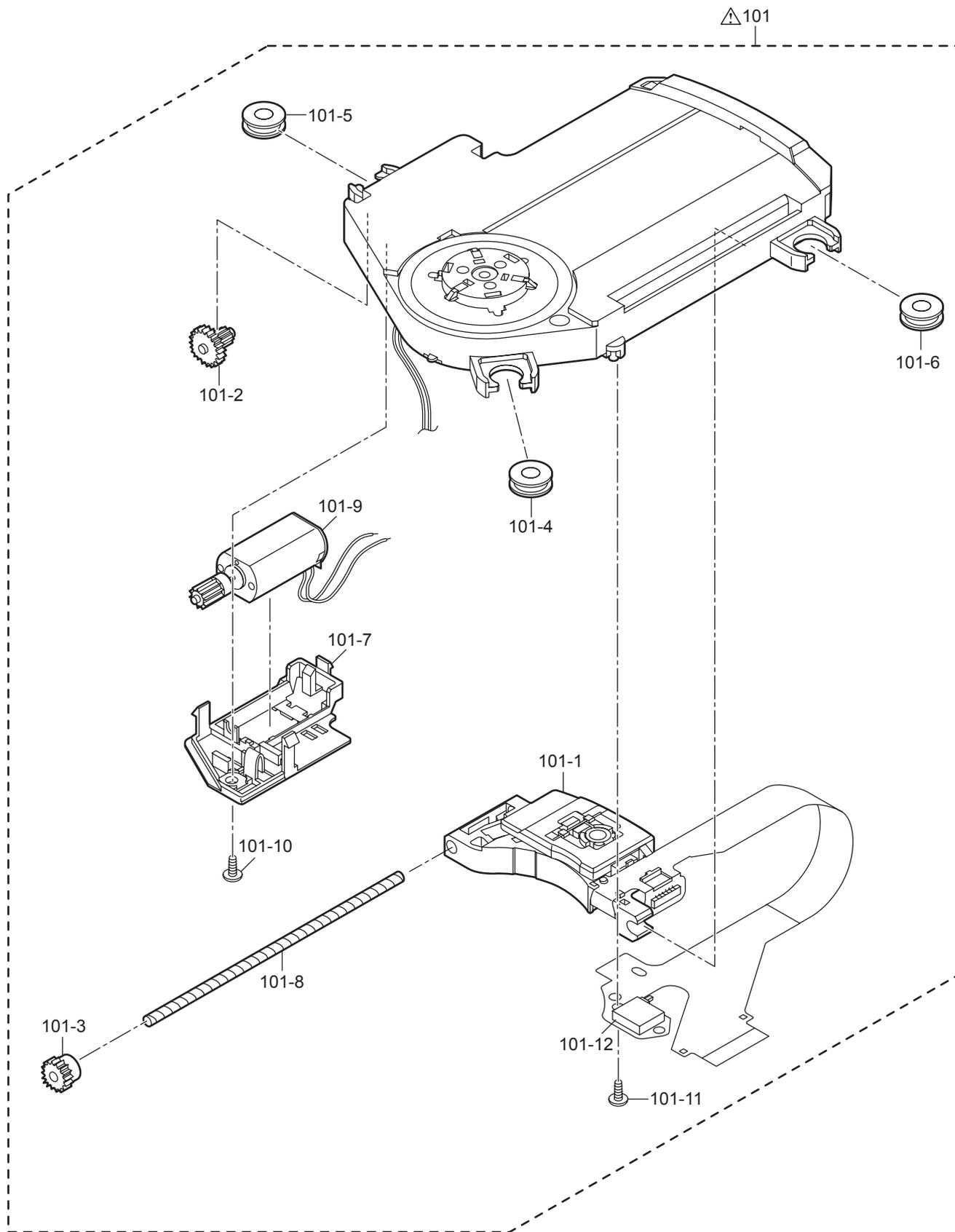
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
7	RGU2417-W1	OPR BUTTON A	1	
8	RGU2418-W1	OPR BUTTON B	1	
9	RGU2419-W	OPEN BUTTON A	1	
10	RGU2420-W	OPEN BUTTON B	1	
11	RHQ0088-S	SCREW	1	
12	RHQ0088-S	SCREW	1	
13	RHQ0088-S	SCREW	1	
14	RKK0171-W	BATTERY LID	1	
15	RKM0543B-W1	MIDDLE CABINET	1	
16	RKW0793-A	LCD WINDOW	1	
17	RMC0662	DETECT SPRING	1	
18	RMR1789-X	HOLDER	1	
19	XTN17+6GFJK	SCREW	1	
20	XTN17+6GFJK	SCREW	1	
21	XTN17+6GFJK	SCREW	1	
22	XTN17+6GFJK	SCREW	1	
23	XTN17+6GFJK	SCREW	1	
24	XTN17+6GFJK	SCREW	1	
25	RFKNSX480EGS	CD LID ASS'Y	1	(SX480)
25	RFKNSX482EES	CD LID ASS'Y	1	(SX482)
25	RFKNSX475EBS	CD LID ASS'Y	1	(SX475)
##		TRAVERSE PARTS		
A	101	RAE0240Z-7X	TRAVERSE DECK UNIT	1
101-1	RAF0240A-8X	OPTICAL PICK-UP	1	
101-2	RDG0554	GEAR 1	1	
101-3	RDG0555	GEAR 2	1	
101-4	RMG0605-K	FLOATING RUBBER	1	
101-5	RMG0605-K	FLOATING RUBBER	1	
101-6	RMG0605-K	FLOATING RUBBER	1	
101-7	RMQ1125	MOTOR HOLDER	1	
101-8	RMS0782-1	SHAFT	1	
101-9	PKN7EB90A2	TRAVERSE MOTOR ASSY	1	
101-10	XQN17+BG45FJ	SCREW	1	
101-11	XQN17+BG45FJ	SCREW	1	
101-12	K0L1BB000025	SW,REST DET.	1	
##		ACCESSORY AND PACKAGING		
A1	RQT8474-E	O/I BOOK	1	(SX480)
A1	RQT8475-B	O/I BOOK	1	(SX480)
A1	RQT8660-R	O/I BOOK	1	(SX482)
A2	LOBAB0000182	STEREO EARPHONES	1	(SX480)
A2	LOBAB0000183	STEREO EARPHONES	1	(SX482)
A3	RFEA431E-2S	AC ADAPTOR	1	(SX480)(SX482)
A4	N2QCBD000010	WIRED REMOTE CONTROL	1	(SX482)
P1	RPK2426	GIFT BOX	1	(SX480)
P1	RPK2459	GIFT BOX	1	(SX482)
P2	RPQ1848	PAD	1	(SX480)(SX482)
P3	RPF0111-2	PROTECTION BAG	1	(SX480)(SX482)
##		ACCESSORY AND PACKAGING		
A11	RQT8475-B	O/I BOOK	1	(SX475EG)
A11	RQT8474-E	O/I BOOK	1	(SX475EG)
A12	LOBAB0000182	STEREO EARPHONES	1	(SX475EG)
P11	RPK2448	GIFT BOX	1	(SX475EG)
P12	RPQW0045	PAD	1	(SX475EG)
P13	RPFW0013	PROTECTION BAG	1	(SX475EG)
##		ACCESSORY AND PACKAGING		
A21	RQT8475-B	O/I BOOK	1	(SX475EB,E2)
A22	RQT8474-E	O/I BOOK	1	(SX475E2)
A23	LOBAB0000182	STEREO EARPHONES	1	(SX475EB,E2)
P21	RPHW0020	PROTECTION BAG	1	(SX475EB,E2)
P22	RPN1851	BOTTOM CLAM SHELL	1	(SX475EB,E2)
P23	RPN1852	TOP CLAM SHELL	1	(SX475EB,E2)
P24	RPQ2121	CARD	1	(SX475EB,E2)
P25	RPQ2122	CARD	1	(SX475EB)
P25	RPQ2120	CARD	1	(SX475E2)

S7. Exploded View

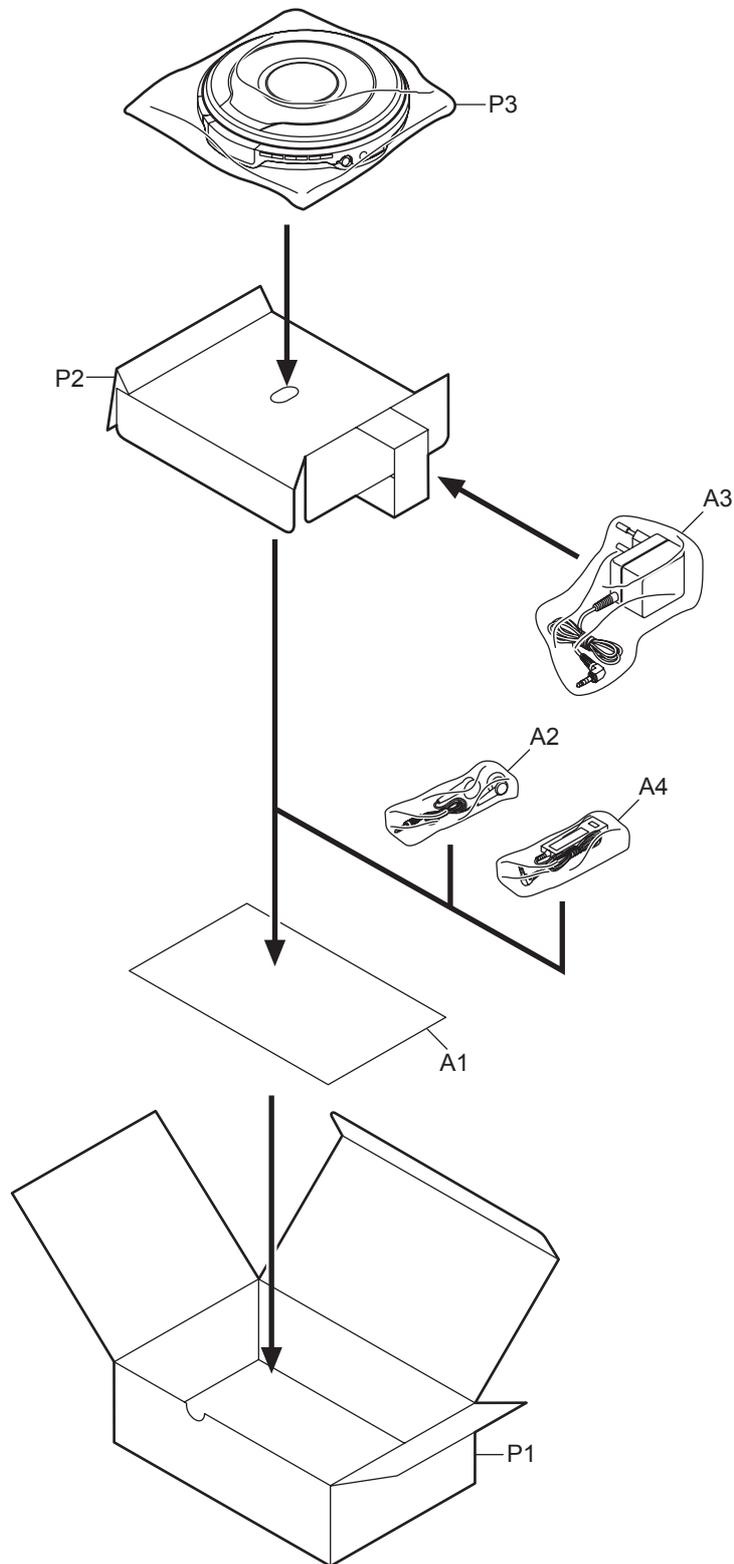
S7.1. Frame and Casing Section



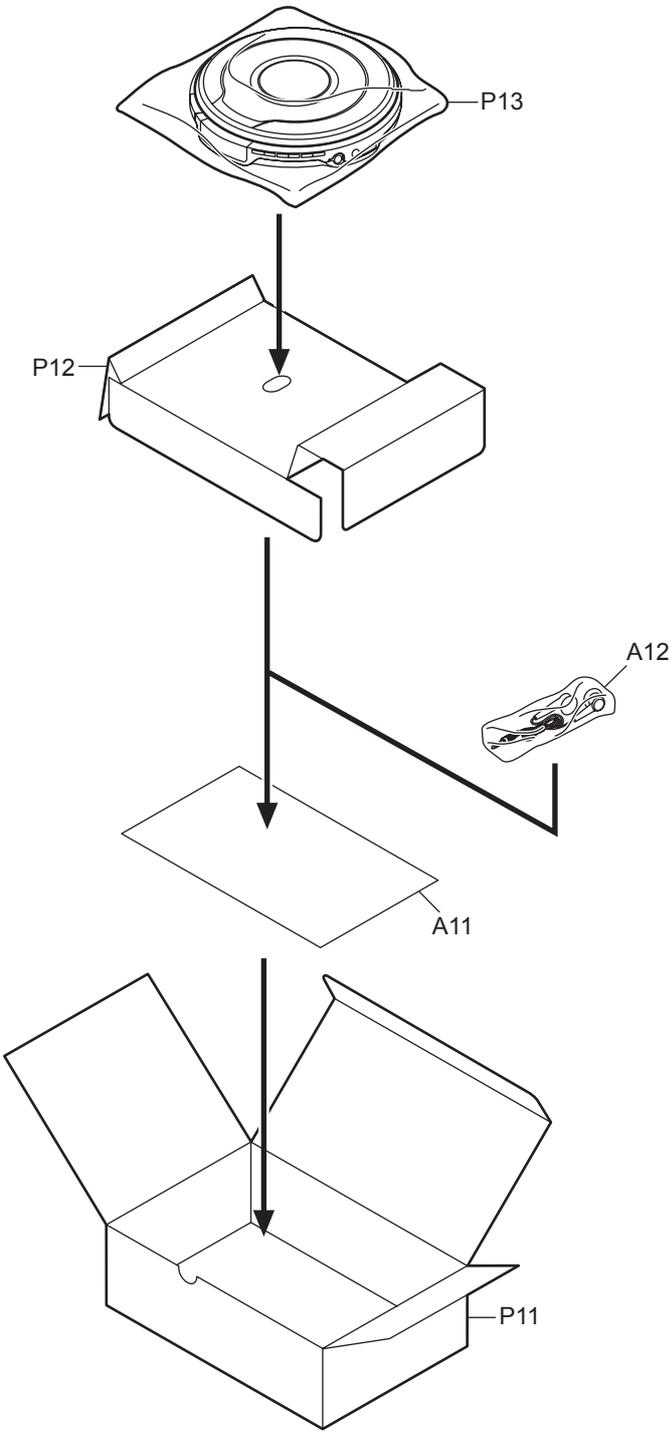
S7.2. Traverse Unit Parts Location



S7.3. Packing Section (SL-SX482EE_SL-SX480EG)



S7.4. Packing Section (SL-SX475EG)



S7.5. Packing Section (SL-SX475E2/EB)

